Tendências Consultoria Integrada
498, Estados Unidos St., Jardim Paulista 01427-000, São Paulo, SP
Phone: +55 11 3052 3311 Fax: +55 11 3884 9022 www.tendencias.com.br

THE ECONOMIC IMPACT OF BRAZIL'S AUDIOVISUAL INDUSTRY

October 2016

Tendências Consultoria Integrada
498, Estados Unidos St., Jardim Paulista 01427-000, São Paulo, SP
Phone: +55 11 3052 3311 Fax: +55 11 3884 9022 www.tendencias.com.br

THE ECONOMIC IMPACT OF BRAZIL'S AUDIOVISUAL INDUSTRY

CONTENTS

THE ECONOMIC IMPACT
OF BRAZIL'S AUDIOVISUAL INDUSTRY

Executive Summary

Data for the audiovisual industry

a. Data updates

For the labor market indicators, such as employment and wages, we have used the Ministry of Labor RAIS' data. We have included numbers for 2013 and 2014. We used the latest Input-Output Matrix (2013). It provides more recent data when compared to the previous report and makes it possible to quantify effects specific to the audiovisual sector.

The results obtained from this 2013 matrix will sometimes differ from those of the previous study due to methodological changes by the IBGE. The differences are explained in the report.

b. Results

Considering RAIS methodology: Increase of employment level in the industry, which reached 168,880 in 2014; Increase of average monthly income, from BRL 2,890 in 2007 to BRL 3,582 in 2014 (R$ July/2016).

Considering MIP methodology: The multipliers for employment (2.94), value added (1.90) and tax revenues (1.66) are up from the previously estimated; Increase of the indirect jobs resulted from the audiovisual sector, which reached 327,482 in 2014; Increase of audiovisual industry in terms of value added, production and tax revenues (nominal figures):

- Value added: BRL 18.6 bn in 2013;
- Production: BRL 44.8 bn in 2013;
- Tax revenues: BRL 2.2 bn in 2013.

Video on Demand Regulation

VoD has dramatically increased lately, affecting both supply and demand in the audiovisual sector and currently is the leading expansion vector of the sector. Specific legislation in order to regulate the sector is being developed and, despite the fact that the full contents of this legislation are yet to be disclosed, the regulator has signalized three main instruments, in order to promote national production:

- A quota policy is likely to be proposed, aiming at placing local content within the platforms, but whose model is not defined yet;
- Rules that ensure visual prominence to domestic titles in the services' access page;
- Funding policies, mainly the charge of Condecine [Brazil's film industry tax];

We are cautious of some of these policies, given some measures (like quotas and new taxes) may impose barriers to the proper development of the sector. Given the fact that the VoD is fairly new, highly dependent on technology and still in transformation, restrictive regulation may prevent the sector from developing and, under this scenario, the own players of this market would be harmed.

The government is still studying how VoD services should be taxed. If the new rules lead to an increase of the fiscal burden, impacting the prices for the service, the development of this market in Brazil could be harmed. Moreover, it could encourage the consumption of illegal products, notably in pirate websites.

It is important to stress, however, that the sector's expansion is mandatory in order to assure opportunities for Brazilian producers and programmers, being the legislation's main objective to ensure proper conditions for it.

Piracy

Piracy results on negative effects over the economy and society and has migrated to the exhibition through the Internet, mainly over streaming, facing the strong and increasing migration to this platform. Accordingly to recent MPA data there are more than 400 websites for piracy specialized on the Brazilian market, among which 57 have more than 1 million visitors per month, offering more than 13,000 national and international titles. The majority of those websites is hosted on servers located abroad, which presents an additional challenge in fighting it.

Access to Film Theaters And Cinema Digitalization

Movie theater tickets sold in Brazil rose from 149.5 million tickets in 2013 to 173 million tickets in 2015 and total revenues for the exhibition segment movie theater sector jumped from BRL 1.7 billion in 2013 to BRL 2.4 billion in 2015. The number of movie screens in Brazil had a 12.2% increase, from 2,679 to 3,005 in the 2013-2015 period.

Digital screens, which used to represent 31.1% of total screens in 2012, are now 95.7% of the total (data from the 1st semester of 2016) and a significant portion of the population (46%) still does not have access to this market in the cities where they live. The figure is down from 52% in the previous study.

Large cities concentrate most of movie theaters. In 2015, there were movie theaters in only 1.4% of the cities with a population of 50,000 inhabitants or less. One factor that undermines such access is the price of the tickets. According to a UNESCO study, the average ticket price in Brazil amounted to 0.6% of the monthly income per capita in Brazil in 2013, much higher than the 0.3% ratio for a sample of developed countries. Tax burden, as well as the subsidy policy for certain social groups, also hinder the access. According to a study by the Brazilian Institute of Planning and Taxation - IBPT, tax burden represents 30.25% of ticket prices in 2015. As for subsidies, students, elders and public school professors are entitled to pay only half price and given flawed checking mechanisms there are incentives for opportunistic behavior.

Potential Growth

Despite the recent advances in several areas, the Brazilian audiovisual sector still has challenges to overcome, most notable regarding (i) trade deficit, given more than just a trade deficit in audiovisual services, the industry's exports have a downward trend. They presented a fall of 24.2% between 2007 and 2012, losing its share in the total exports; (ii) national production, considering that despite the growth in the number of Brazilian releases for the period, the share of domestic titles in movie ticket sales did not keep the same pace; and (iii) coproduction and co distribution, as Brazil has historically developed international partnerships for movie production. Co-distribution, however, remains stabilized.

There is still potential for the development of this sector, highlighting the importance of a well-designed regulation to promote a higher degree of integration inside the industry's global chain. As it was already noticed, it is highly important to curb piracy and create a regulatory environment that favors the development of VoD.

1 Introduction

In August 2014, the Motion Picture Association of Latin America (MPA-AL), in association with the Audiovisual Industry Interstate Union, released the study "The Economic Impact of Brazil's Audiovisual Industry." Developed by Tendências Consultoria, the study is intended to gather and analyze existing information on the sector to help inform the debate about the outlook for this business in Brazil and how public policy could affect its development.

The audiovisual industry is one of the most dynamic and innovative branches of the economy, falling under the so-called "creative economy" category. Considering the latest advances in the sector, especially the surge of video-on-demand (VoD) services, the present document sets out to enhance the previous study, including an analysis of this particular segment. We shall look into its main characteristics, as well as its recent development and prospects for its progress in Brazil, where new regulation will soon be introduced.

Moreover, this study updates information on the production, distribution, and showing of audiovisual content, as well as how the industry impacts the Brazilian economy in terms of job creation, salaries, and other material variables. The need to address recent advances in the audiovisual sector and methodology changes made by the Brazilian Institute of Geography and Statistics (IBGE) to its Input-Output Model—which we used to estimate the direct and indirect effects of the industry on the economy—is what prompted us to revise the data.

To this end, following this brief introduction, Brazil's audiovisual sector will be described in Section 2, where its main features and players will be pointed out. We will then move on to detailing its production chain, from production to distribution of content to consumers, in order to acquaint readers with specific attributes of the industry. The many content distribution channels will also be highlighted, especially digital media over the Internet, which has shown impressive growth and is likely to show even greater progress in the near future.

The following section introduces some facts and figures about the industry in Brazil, such as the number of jobs it generates directly and indirectly, its total payroll, and the average salary and employee profile in each of its segments. Information about production volume and foreign sales will also be presented.

Section 4 will trace a brief history of some of the milestones in the regulatory framework of the industry. Also, we will discuss the issue of piracy, which has deleterious effects on the economy, particularly the audiovisual sector.

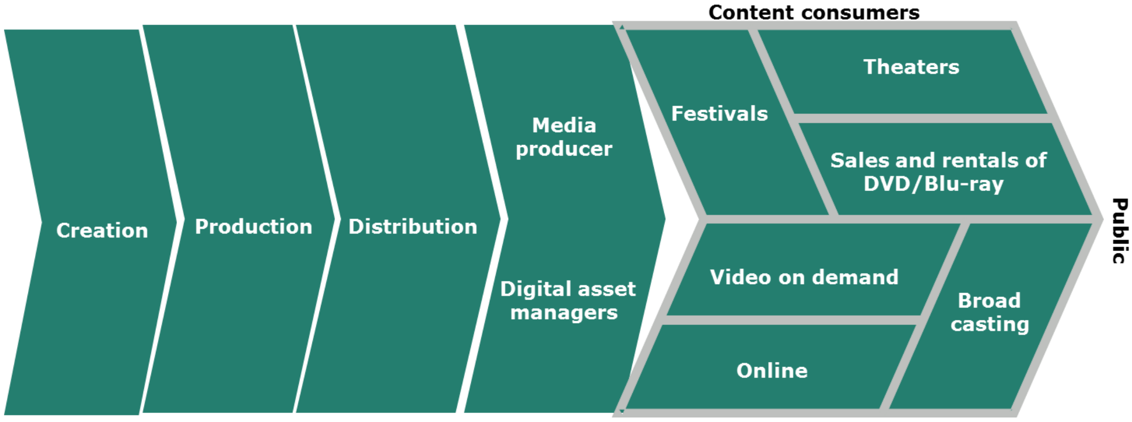
In light of the points discussed in the previous segments, the main challenges we believe to be facing the development of the AV industry in Brazil will be laid out in Section 5, along with the conclusions of this study.

2 Description Of The Film And Television Chain

This section presents a brief description of the value chain for film and television. This is a dynamic and inherently innovative sector, whose structure is constantly changing. Over the course of its development, the industry has experienced major breakthroughs, such as the advent of sound film, television, home video systems, and, more recently, video streaming services. These events have dramatically changed how the industry is organized, creating opportunities for both established and new players.

In Brazil, the AV industry structure consists of production, distribution, and showing of audiovisual content[1]. Despite the changes introduced by the dissemination of digital technology (broadband Internet, satellite and cable TV, streaming services, and other home entertainment resources), we could say the industry is currently arranged as illustrated in the picture below.

Chart 1. Basic Structure Of The Film And Television Value Chain



Source: Nordicity. Prepared by Tendências.

Generally speaking, after original audiovisual content is conceived, it is usually produced, distributed, and shown on several different platforms. In the case of the film industry value chain, for example, international studios and/or independent studios produce motion pictures, which are then sent to movie theaters by distributing companies—many of which belong to the same studios. In most cases, screening in movie theaters is the first step in film distribution, shortly after which comes physical release (DVD and Blu-ray) for sale and rental, and releases to pay-per-view (PPV), pay or broadcast TV, video on demand (VoD), and other media[2]. Some productions—particularly short series—are conceived specifically for television or some media other than film theaters.

The television market—which includes broadcast and pay TV networks—works in similar fashion: the network, which is usually behind the production of its own shows, airs them on its channel first. After some time, a show may run in syndication on

[1]This structure is similar to that observed in other countries, such as Canada. See: Nordicity (2013). *The Economic Contribution of the Film and Television Sector in Canada.* Available at:<http://mpa-canada.org/wp-content/uploads/2014/03/MPA-Canada_Nordicity-Report_July-2013_English.pdf>. Accessed on August 08, 2016.

[2]Alternative release methods have emerged with the spread of new ways to consume AV content. This topic will be addressed later in the report.

other networks (specialized channels, for example), or be released for sale or rental in physical format or to VoD services[3]. Brazilian TV broadcasters have a great tradition and proven competence in producing telenovelas (soap operas) and miniseries, which are even distributed internationally.

The advent of new technologies provided more ways to show audiovisual content to audiences. Consumers may choose to watch a movie, for example, at the theater, on television, or online (streaming via platforms such as Netflix or iTunes), or yet rent it at a video store. This proliferation of media formats not only helps lowering prices, but also adds value to the consumer experience and promotes market growth, since it allows content to reach wider audiences in a more convenient manner.

Production fragmentation is a striking feature of the AV sector, in that specific tasks are outsourced to specialized partners all over the world. In addition to boosting production efficiency throughout the value chain, this paradigm fosters entrepreneurship, as it allows small- and medium-sized content providers—most of which began as start-ups—to participate. To some extent, this system is in place in all markets, and Brazil is no exception. Companies of different sizes, based both in Brazil and overseas (see Box 1), collaborate to varying degrees on the domestic production process.

In most cases, local players operate on a small scale and benefit from the cooperation with more established studios, which have access to greater creative, technological, and financial assets. On the one hand, this cooperation allows local productions to draw on these players' established expertise, thus enhancing the national output. On the other hand, by associating with companies that operate on a global scale, local producers can distribute their work to a wider audience and secure better financial returns.

This increased market internationalization, which increases content diversity and even affects storylines, is only possible because of the new ways to produce, distribute and show content. The penetration of pay TV and broadband Internet can increase audiences and encourage production in other countries, while also tapping into niche markets around the globe. The possibility of creating new business models also multiplies alternatives and opportunities to distribute innovative content supplied by local producers. However, the benefits of this arrangement are only reaped in full when producing for and consuming these media formats is possible. On the one hand, consumers must have access to this content, be it in a digital movie theater or via fast Internet connection. On the other, domestic producers must be able to produce digital content in order to join the global value chain. Again, co-productions are an effective way of reaching the latter goal.

[3] The dissemination of digital media has reduced the so-called "release window"—industry slang for the period between a film's release in theaters and its arrival in other media outlets. Another trend the digital reproduction of content in movie theaters or at home has catalyzed is the distinctly shorter time gap between film releases in mature and emerging markets. In some cases, the release occurs simultaneously in all countries.

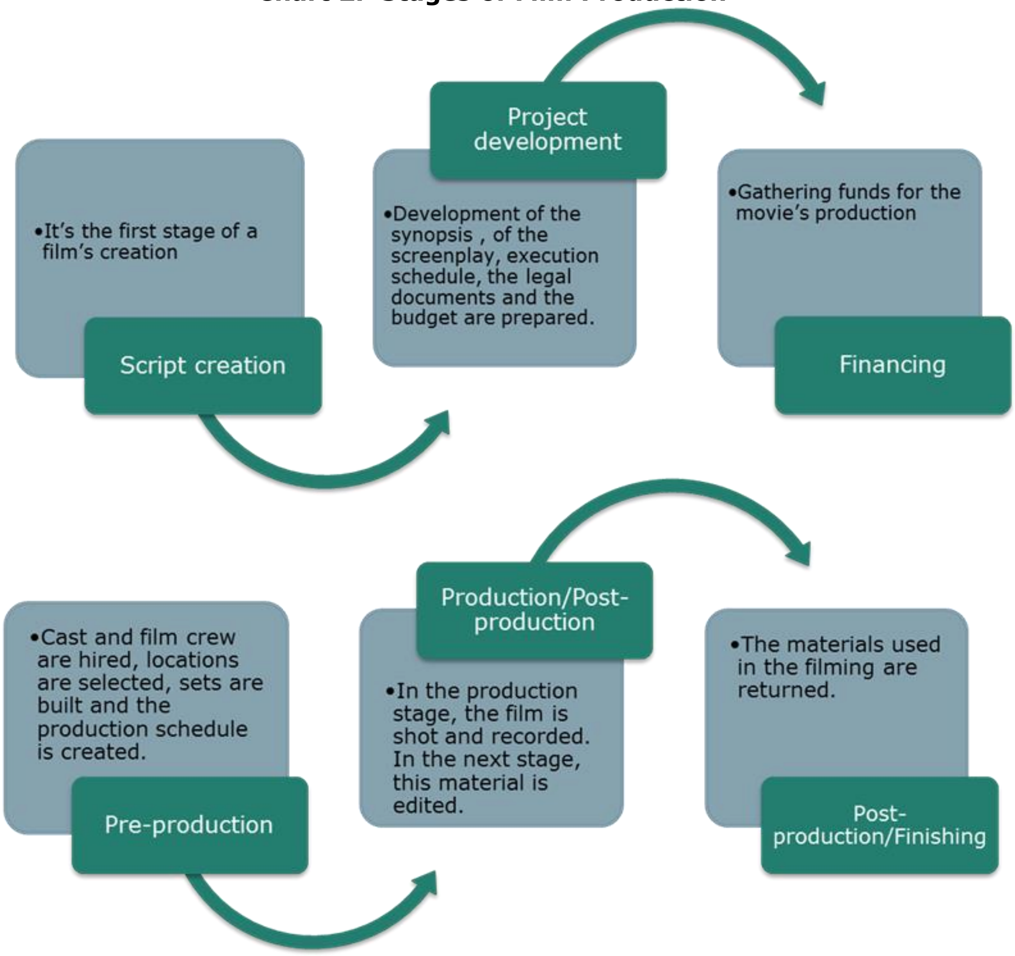
The stages of content creation (including financing, pre- and post-production), distribution (including marketing), and showing (in several media) will be analyzed separately in the following pages. Because of the changes they have generated across all stages of AV production, video-on-demand (VoD) services will be discussed in a separate subsection.

2.1 Production

Production may be defined as the act of turning the ideas of screenwriters and directors into concrete projects. This segment includes the process of creating content for movie theaters (and VoD services), television, and advertising agencies.

According to Rodrigues (2007)[4], producing a movie involves making large initial investment to hire and maintain a relatively large specialized crew. The process can be divided into the following stages:

Chart 2. Stages of Film Production



Source: Rodrigues (2007). Prepared by Tendências.

Within this context, the production company has a pivotal role, since it is responsible for making the technical and functional work possible, and sometimes for financing the project as well.

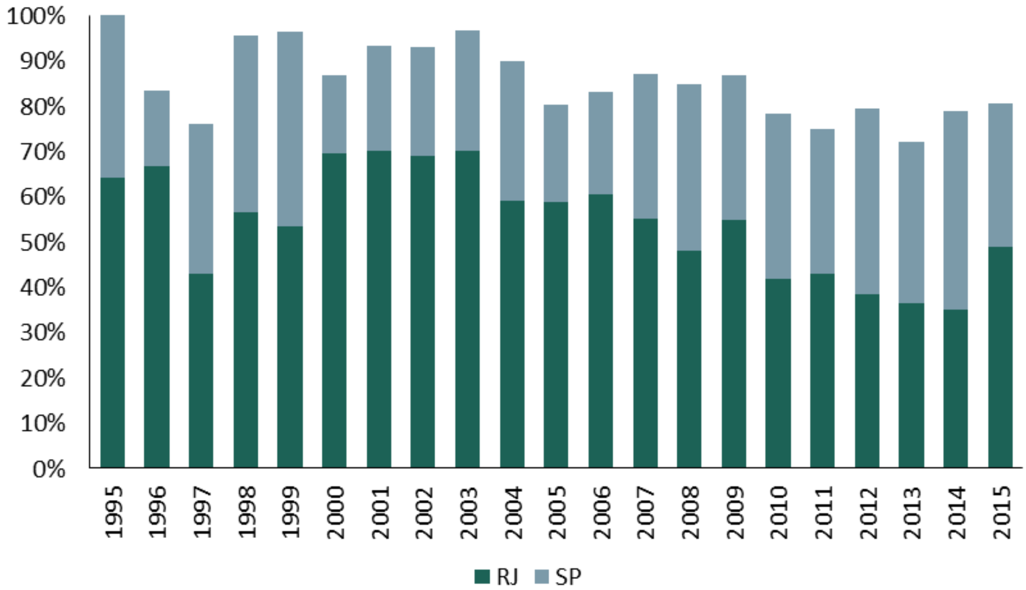
---

[4]See: Rodrigues, C. (2007). *O Cinema e a produção (Filmmaking And Production).* 2nd Edition. Lamparina.

The film production market in Brazil may be considered fragmented[5], with hundreds of independent production companies in operation[6], most of which have a small market share (312—or 68%—of the country's 485 existing companies have released only one movie). There are also larger, established companies on the market, such as GloboFilmes, O2 Cinema, Diler & Associados, and Zazen Produções, which account for a wide range of productions. It should be noted that, the vast majority of Brazil's greatest box-office hits were made by consortiums of production companies that involved international studios on the production and/or the distribution end (see Box 1).

With regard to how film production is geographically distributed in Brazil, notice in the chart below that the states of São Paulo and Rio de Janeiro particularly stand out. Considering the amount of movies produced in every state between 1995 and 2015, these two accounted for respectively 49% and 33% of all Brazilian productions[7] (in 2015, the shares were 49% and 32%, respectively). Nevertheless, the share of these states has decreased over the past few decades.

Chart 3. Brazil's Feature Film Production By State (1995 – 2015)



Source: OCA/ANCINE. Prepared by Tendências.

2.2 Distribution

Once a movie is ready, it enters distribution phase. This stage includes disseminating it to movie theaters, television, and other media formats, as well as producing DVDs and Blu-ray discs for sale or rental. Distributing companies are responsible for submitting the original copies (digital or physical) that will be screened, aired, or streamed to consumers.

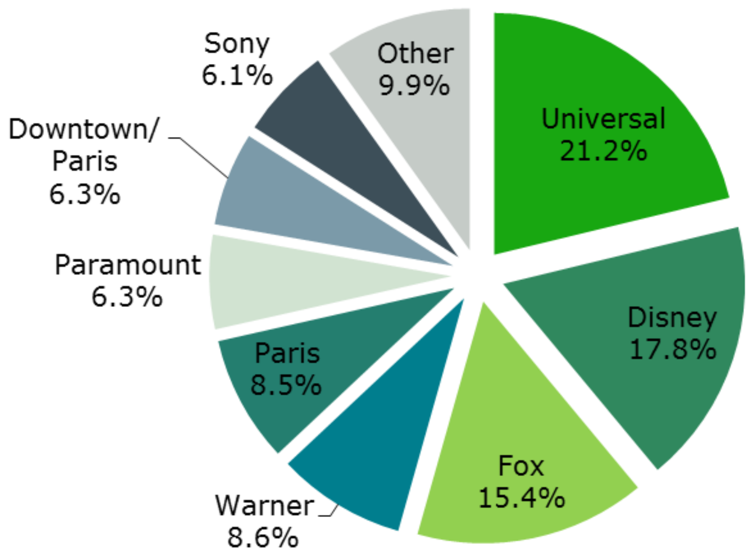
---

[5] According to data compiled by the Brazilian Filmmaking And Audiovisual Observatory (OCA/ANCINE), between 1995 and 2013, about 1000 Brazilian movies, produced by 485 different companies, were released.
[6] Companies with no direct link to television networks (broadcast or cable).
[7] Among the other content-producing states, Rio Grande do Sul stands out, with 4.7% of the national production.

In the case of physical media, another link is required in the chain. Media manufacturers are responsible for replicating the original masters in consumer formats, such as DVDs, Blu-ray discs, and film stock for (analog) theater screening. Also, with the proliferation of digital content, the role of digital asset managers has become increasingly important. They are responsible for coding digital copies (of movies and television shows), as well as sending them out to (digital) theaters and online services[8].

According to data from the Brazilian Film and Audiovisual Observatory (or OCA, run by the National Film Agency [ANCINE]), the domestic market had 88 theater distribution companies in 2015[9]. Together, these companies earned R$2.4 billion that year, most of which was generated by only a handful of players. As can be observed in the chart below, eight distributing companies accounted for over 90% of the industry's earnings in 2015, only one of which is Brazilian (Paris Filmes).

Chart 4. Film Industry Earnings By Distributor (2015)



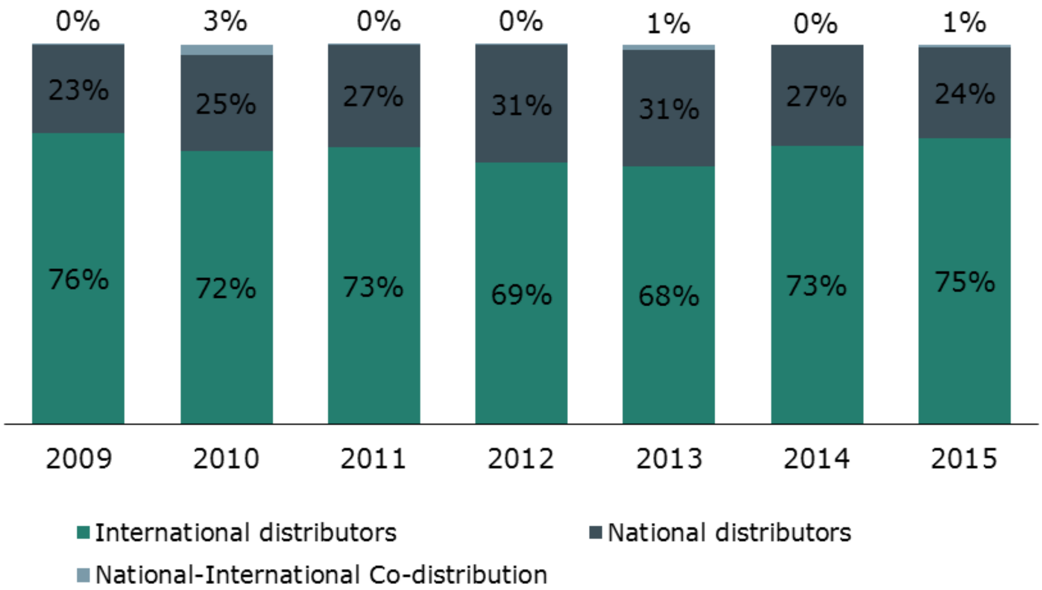
Source: OCA/ANCINE. Prepared by Tendências.

Admittedly, when we analyze the history of the distribution market, we notice that the audience of (and consequently the revenue from) films released by international distributors is way larger. While Brazilian companies account for about 80% of all movie releases in the country—95% of national titles and 73% of international titles—, their earnings make up only 24% of the industry's earnings, a share that has decreased over the past few years. It should also be pointed out that, in recent times, the share of co-distributions (by international and domestic companies in partnership) in film releases and film earnings remained comparatively unchanged near zero, which goes to show that this strategy could be better explored by national distributors[10].

---

[8] See: Nordicity (2013), Note 1.
[9] Including domestic and international distributors, as well as partners. Information available at: <http://oca.ancine.gov.br/distribuicao.htm>. Accessed on August 09, 2016.
[10] See Box 1.

Chart 5. Share Of Industry Earnings Over Time



Source: OCA/ANCINE. Prepared by Tendências.

Box 1: Collaboration With International Studios In Production And Distribution

The co-production and co-distribution of media content by two or more companies is a common practice in the audiovisual industry.

International co-production could be defined as the joint work of producing companies from different countries to develop a movie project, for example. Hoskins *et al.* (1996)[1] argue that there are a number of benefits to coproducing films. Of these benefits, the following could be highlighted: (a) easier funding; (b) access to more government incentives and subsidies; (c) access to the co-producer's market[2]; (d) access to less expensive material and services; (e) possibility to learn from the co-producer; (f) possibility to specialize in tasks in which the other co-producer is more skilled.

Brazilian producing companies have profited from the possibilities provided by co-productions, having cut production deals with companies from several different countries[3]. The table below shows the number of production partnerships formed by Brazilian companies between 2005 and 2015, as well as the type of each partnership (majority, equal, or minority).

International Co-Productions Involving Brazilian Companies

Production Year	Total	Brazilian Partnership			
		Equal	Majority	Minority	N/A
2005	1		1		
2006	3	1	2		
2007	6	1	3	1	1
2008	12	2	3	6	1
2009	6		4	2	
2010	9		7	1	1
2011	15		8	7	
2012	9		3	5	1
2013	21	3	8	9	1
2014	14		9	5	
2015	7		6	1	
Total	**103**	**7**	**54**	**37**	**5**

Source: OCA/ANCINE. Prepared by Tendências.

Note that the number of international partnerships involving Brazilian companies has grown over the past decade, especially in 2013—when 21 co-productions were recorded. In most of these, Brazil is a major partner.

To encourage this practice, the Brazilian government maintains bilateral agreements with several countries to facilitate the co-production process. According to the National Film Agency (ANCINE), Brazil has agreements with Germany, Argentina, Canada, Chile, Spain, France, India, Italy, Portugal, and Venezuela[4].

Brazilian production companies can also partner with companies from countries with which Brazil has no agreement. In cases like this, however, the co-production could be hindered by domestic restrictions, such as the requirement that two thirds of the cast and crew be either Brazilian citizens or local residents for over three years, and that the partnership agreement guarantee that at least 40% of ownership rights are held by the Brazilian party[5]. Moreover, certain criteria must be met for an international co-production to be recognized as Brazilian and thus become eligible for public funding. This information comes from Executive Order 2228-1 (September 6, 2001) and ANCINE's Normative Ruling 106 (from July 24, 2012).

Co-distributions follow the same logic as international co-productions—domestic and foreign distributors partner up to distribute content produced in Brazil. However, this is not a very popular practice in the country. An overview of ANCINE figures shows that co-distributions between Brazilian and international companies accounted for a negligible share of the titles released in the Brazilian market. Between 2009 and 2015, only 10 movies were co-distributed by domestic and international companies, which is less than 1% of the movies released in the period (2520 titles).

Conversely, though, co-distribution agreements among Brazilian companies are fairly common. According to data from ANCINE, the partnership between Downtown Filmes and Paris Filmes, for example, accounted for about 53% of the revenue generated by national films in 2015 (6.3% of the film industry's overall revenue).

Below are Brazil's greatest box-office successes between 1995 and 2015. Some of these movies were commercially distributed overseas. Note that most of them were co-productions—many of which involved foreign companies. The same is true about their distribution.

Brazil's Top 15 Box-Office Hits (1995-2015)

Title	Year	Production	Distribution	Audience
Elite Squad: The Enemy Within	2010	Globo Filmes, Feijão Filmes, Riofilme, and ZazenProduções	Riofilme	11,146,723
If I Were You 2	2009	GloboFilmes, Lereby Productions, and Total Entertainment	Fox Entertainment and Fox Filmes do Brasil	6,112,851
Two Sons of Francisco	2005	Columbia TriStar, Conspiração Filmes, Globo Filmes, and ZCL Produções	Columbia TriStar	5,319,677
Head Over Heels 2	2012	Downtown Filmes and Globo Filmes	Downtown, Paris Filmes, and Globo Filmes	4,846,273
Carandiru	2003	Columbia TriStar, GloboFilmes, HB Filmes, Lereby Productions, and Oscar Kramer S.A.	Columbia Pictures do Brasil	4,693,853
My Mom Is a Character	2013	Cenoura Filmes, Globo Filmes, Midgal Filmes, Paris Filmes, and Telecine Productions	Downtown and Paris Filmes	4,600,145
Astral City: A Spiritual Journey	2010	Cinética Filmes e Produções, Globo Filmes, and Midgal Filmes	Fox Filmes do Brasil	4,060,304
Till Luck Do Us Part 2	2013	GloboFilmes, Gullane Filmes, IluminattaFilms, Paris Filmes, Riofilme, and Telecine Productions	Downtown and Paris Filmes	3,978,191
Loucas Pra Casar	2015	Glaz Entretenimento and Globo Filmes	Downtown	3,726,547
If I Were You	2006	GloboFilmes, Lereby Productions, and Total Entertainment	Fox Entertainment and Fox Filmes do Brasil	3,644,956
Head Over Heels	2011	Downtown Filmes, Globo Filmes, Morena Films, and Paris Filmes	Downtown and Paris Filmes	3,506,552
Till Luck Do Us Part	2012	Globo Filmes and Gullane Filmes	Paris Filmes	3,417,510
Chico Xavier	2010	GloboFilmes and Lereby Productions	Sony and Downtown	3,413,231
City Of God	2002	O2 Filmes, VideoFilmes, GloboFilmes, Lumière, Wild Bunch, Hank Levine Film, and Lereby Productions	ImagemFilmes	3,370,871
Vai que Cola: O Filme	2015	ConspiraçãoFilmes	H2O Films	3.370.871

Source: OCA/ANCINE and IMDb. Prepared by Tendências.

[1]Hoskins, C. et al. (1996). A Comparison of domestic and international joint ventures in Television Program and Feature Film Production, vol. 21, nº 1. Canadian Journal of Communication. Available at: <http://www.cjc-online.ca/index.php/journal/article/view/924/830>. Accessed on August 10, 2016.
[2]As the study points out, the partner company is likely to be more abreast of the distribution process in its domestic market and have better connections with key players. It is also likely to be more familiar with the demands of viewers in its home country and thus be able to ensure that these demands are met in production.
[3]Between 2005 and 2015, Brazilian companies established partnerships with companies from numerous countries, most notably: Portugal, Argentina, France, and United States (amounting to 47 films).
[4]Information available at: https://www.ancine.gov.br/legislacao/acordos-internacionais/acordos-bilaterais. Accessed on August 10, 2016.
[5]Information available at: <http://www.ancine.gov.br/manuais/coproducoes-internacionais/passo-passo-para-coprodu-es-internacionais>. Accessed on August 10, 2016.

2.3 Screening

Broadly speaking, the consumption of audiovisual content could be divided into four major categories: theater and festival screening; television (broadcast and cable) airing; DVD/Blu-ray rentals and purchases; and, most recent of all, digital content consumption, which we will look into more closely in Section 2.4.

Theater Screening

The theater screening segment involves, above all, the showing of movies in dedicated theaters. Data from ANCINE show that about 173 million movie tickets were sold in the Brazilian market in 2015, an increase of 11% in audience from the previous year, generating R$2.4 billion in revenue.

Also according to the agency, the domestic market currently has 3,005 operating theaters, most of which are located in large urban areas. This scenario is demonstrated in the table below, which shows the share of Brazilian cities with one or more screens in each population bracket. Note that, at least since early in this decade, theater penetration has remained relatively unchanged in all categories, with no sign of a shift in screening hubs. It should also be pointed out that about 60% of the country's 3,005 movie theaters are located in cities with a population of over 500,000[11].

Table 1. Cities With One Or More Movie Theaters By Population Bracket

Population	2010	2011	2012	2013	2014	2015
50,000 or less	1.7%	1.7%	1.7%	1.7%	1.6%	1.4%
50,000-100,000	29.6%	31.2%	30.3%	27.1%	27.6%	25.6%
100,000-500,000	66.9%	68.2%	68.8%	68.3%	69.7%	71.5%
Over 500,000	100.0%	100.0%	100.0%	100.0%	100.0%	97.6%
Share Of Cities	**6.8%**	**7.0%**	**7.0%**	**7.0%**	**7.1%**	**7.0%**

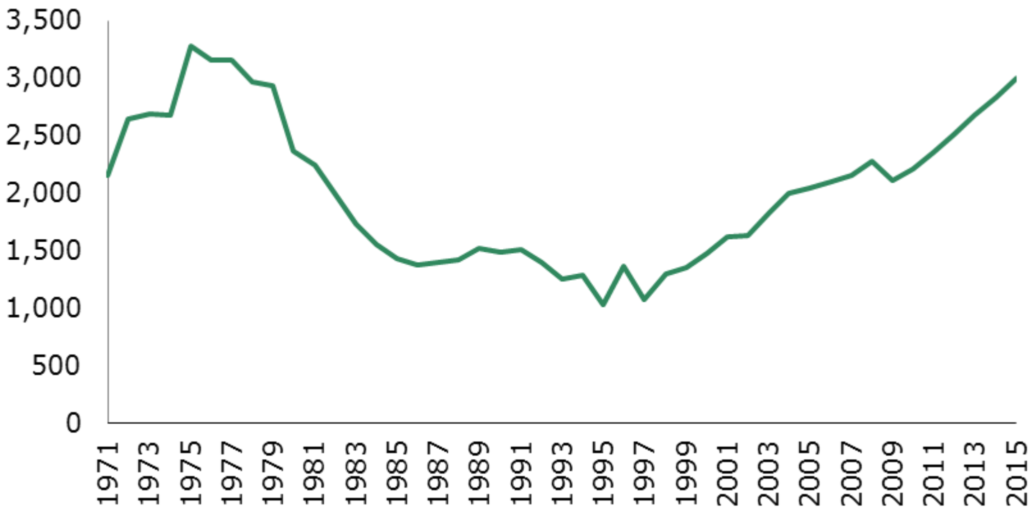
Source: OCA/ANCINE. Prepared by Tendências.

Brazil's economic development, especially as of the mid-1990s, contributed to an upsurge in the demand for movie screening, as did the policies adopted to encourage the film theater industry[12]. As a result, the number of movie theaters saw substantial growth over the past few decades. Despite this trend, as discussed above, access to

[11] Information available at: <http://oca.ancine.gov.br/exibicao.htm>. Accessed on August 11, 2016.
[12] See Section 4.1.

theatrical productions is still fairly restricted, since the recent progress has been limited to larger cities.

Chart 6. Number Of Movie Theaters In Brazil Over Time



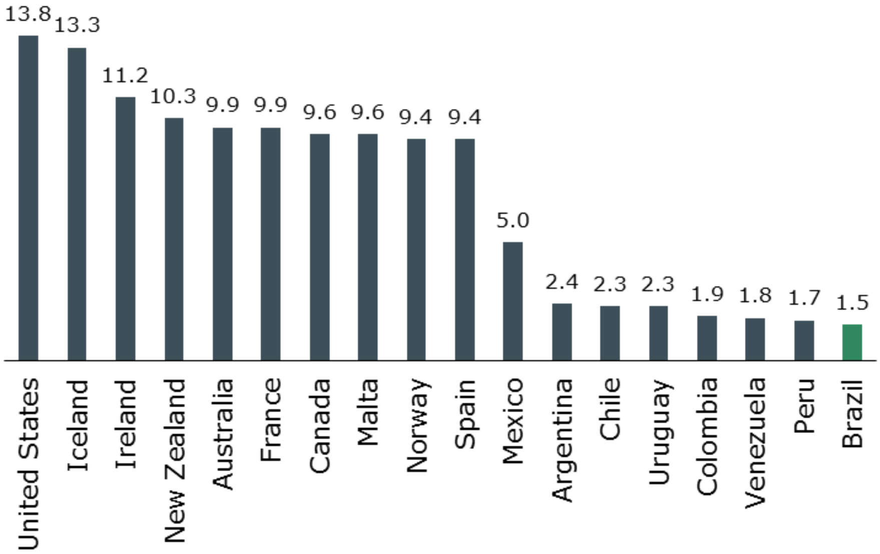
Source: OCA/ANCINE. Prepared by Tendências.

Comparing the number of screening theaters per citizen with that of other countries will also lead us to conclude that theater access in Brazil is poor. This very comparison is shown below for the year 2013, with data from UNESCO for the number of movie theaters per 100,000 citizens[13].

Among the 78 countries surveyed by UNESCO, Brazil ranked 57 in number of movie theaters per 100,000 citizens, behind several Latin American countries (such as Chile, Argentina, Colombia, and Venezuela) and other developing economies. The United States shows the highest ratio (13.8), followed by Iceland (13.3) and Ireland (11.2). The chart below compares the ten highest ratios in UNESCO's list, as well as the ratios for Brazil and its neighboring countries.

[13] Information available at: <http://data.uis.unesco.org/?ReportId=5542&IF_Language=eng>. Accessed on August 11, 2016.

Chart 7. Number Of Movie Theaters Per 100,000 Citizens (2013)



Source: UNESCO. Prepared by Tendências.

In order to show new evidence of the shortage of movie theaters in the country, we conducted a simple exercise. Using the complete list of screening theaters per Brazilian city in 2015 (as per data from ANCINE[14]) and the estimated population of each city (as found by the Brazilian Institute of Geography and Statistics [IBGE][15]), we calculated the number of citizens in cities with no movie theater. The exercise showed that, in 2015, 93.2 million people—about 46% of the Brazilian population—had no access to a film theater in their place of residence[16]. The fact that, despite that still high percentage, there was progress in recent years stands out—in 2012, more than half of the population (51.6%) had no access to a movie theater in their area.

The theater screening segment has also advanced substantially in terms of its capacity for digital content reproduction. The share of digital screens in the Brazilian industry went up from 31.1% in 2012 to 95.7% in the first half of 2016 (data from ANCINE[17]). This leap was largely a result of the announcement by major American studios that, as of 2015, their shipments of film prints would be phased out and all content would be distributed digitally[18]. The list of titles available at analog-only theaters consequently became rather paltry.

---

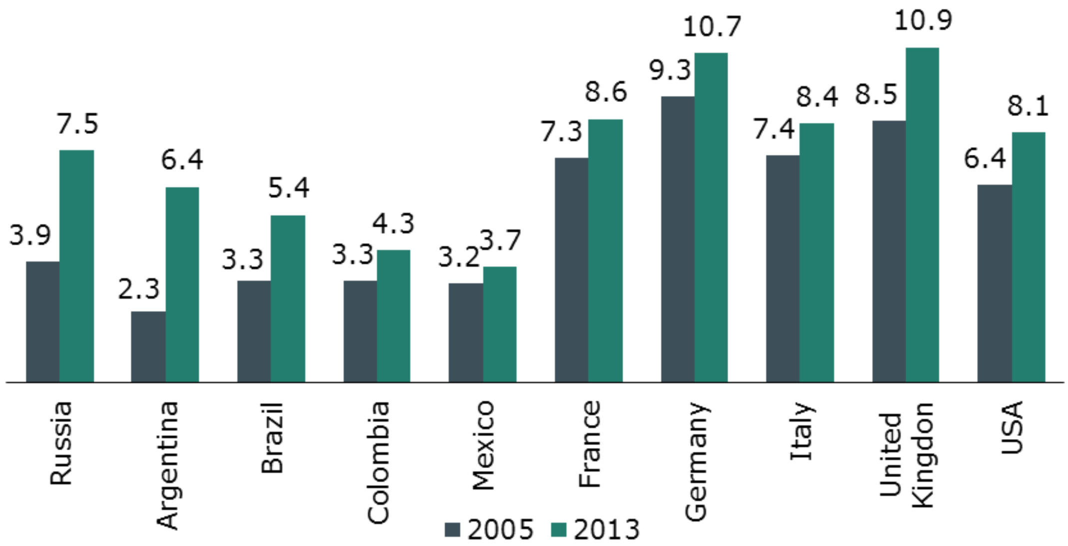
[14] Information available at: <http://oca.ancine.gov.br/exibicao.htm>. Accessed on August 15, 2016.
[15] Information available at: <http://tabnet.datasus.gov.br/cgi/deftohtm.exe?ibge/cnv/poptbr.def>. Accessed on August 15, 2016.
[16] It is important to point out that this exercise overestimates the share of citizens with access to theaters, in that it disregards the fact that residents of one town may visit movie theaters in neighboring towns. Even so, it corroborates the argument made before—that the Brazilian population has limited access to movie theaters.
[17] Information available at: http://oca.ancine.gov.br/informes-trimestrais-2015.htm. Accessed on September 28, 2016.
[18] Information available at: <http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/Galerias/Arquivos/conhecimento/bnset/set3808.pdf>. Accessed on August 15, 2016.

The digital switch is a major step forward for the industry, seeing that, in addition to providing better image and sound quality, digital screening makes it less expensive to produce and distribute content than working with 35mm film.

Another aspect of the domestic market that must be underscored is ticket prices. The Brazilian law grants privileges (such as half-price tickets) to several groups of people (students, seniors, and public school teachers, to name a few). Oftentimes, however, eligibility checks are flawed, which gives way to opportunistic behavior. As a result, although the policy is designed to reduce prices for its beneficiaries, it ultimately boosts prices for other consumers. In addition to the issue of subsidies, ticket prices in Brazil are also affected by the heavy tax burden on the industry, as we'll discuss in further detail in Section 3.4.

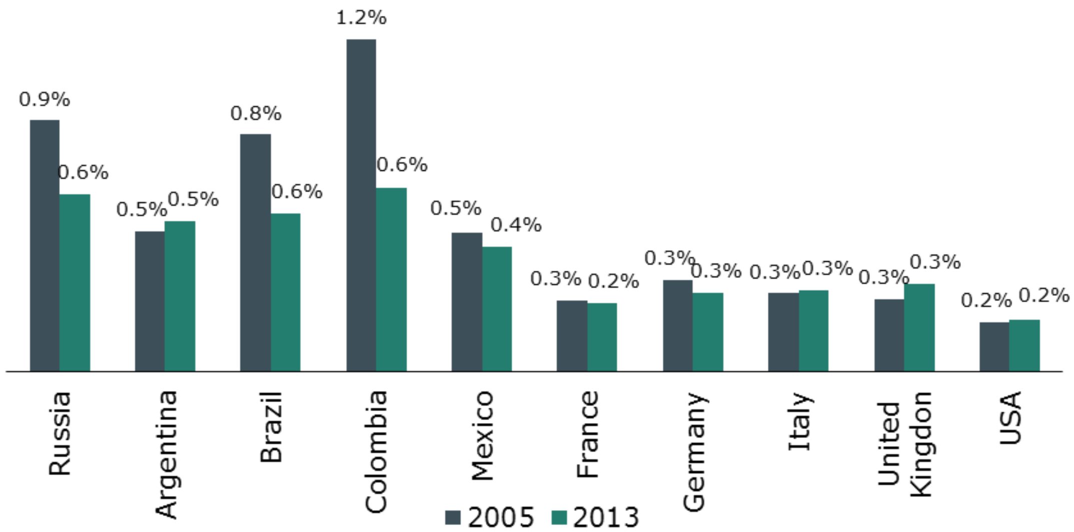
The following charts attest to this scenario, as they compare how average ticket prices have performed in U.S. dollar and in relation to monthly per-capita incomes (%) both in Brazil and in other countries where the industry has similar stature. Note that the average ticket price in Brazil went up from US$3.3 in 2005 to $5.4 in 2013, exceeding those of Mexico ($3.7) and Colombia ($4.3). Although it does not rank among the highest in the group in U.S. dollar, the average movie ticket in Brazil is still relatively expensive when compared in terms of per-capita income.

Chart 8. Average Ticket Price (Current USD)



Source: UNESCO. Prepared by Tendências.

Chart 9. Ticket Price As A Share Of Per-Capita Income (%)



Source: UNESCO. Prepared by Tendências. Note: Monthly per-capita incomes have been calculated using the per-capita GDP in U.S. dollar for each country.

Film festivals also stand out in the theater screening segment. While these events are not major audience-boosters for the participating movies, they play a significant role in the industry's value chain, in that they are an important vehicle for producers and distributers to promote their projects[19].

In Brazil, this is still a rather unexplored path. According to data released by the IBGE[20], only 22% of Brazilian cities claimed to have hosted or sponsored film festivals in 2014. While this is still a small figure, it shows progress from the rate of 9.7% disclosed by the Ministry of Culture[21] in 2010.

Television

The television segment includes broadcasting audiovisual content (broadcast TV) or airing it via a subscription system (pay TV).

According to data from the National Household Sample Survey (PNAD/IBGE)[22], about 97% of Brazilian homes had at least one TV set in 2014, 32.1% of which (or 31.2% of all homes) had a paid subscription plan. These figures show that, while access to other forms of audiovisual content has increased, broadcast TV still plays a major role in Brazil's AV industry, in that it is one of families' primary means of access to culture.

The following chart shows how access to television devices and pay TV subscriptions has developed in Brazil over the past few decades. As can be observed, in the early 2000s TV set penetration among Brazilian homes was already extremely high, whereas access to paid channels was fairly limited (according to data from the

[19] See: Nordicity (2013), Note 1.

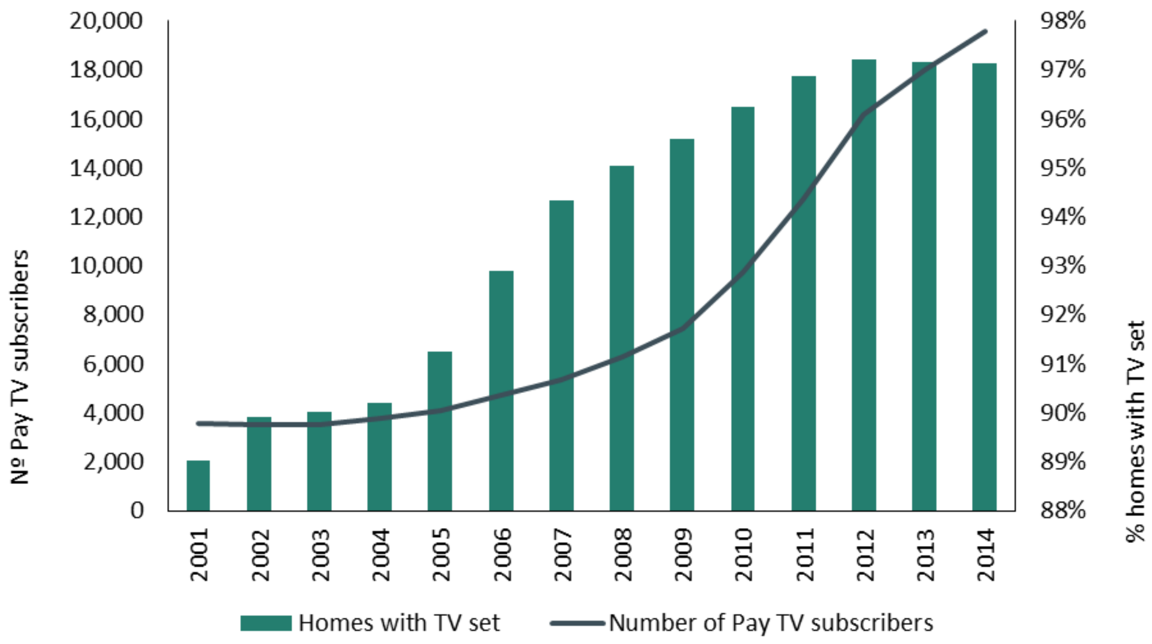
[20] Information available at: http://www.ibge.gov.br/home/estatistica/economia/perfilmunic/. Accessed on September 28, 2016.

[21] Information available at: <http://portal.iphan.gov.br/uploads/ckfinder/arquivos/Cultura_em_Numeros_2010(1).pdf>. Accessed on August 17, 2016.

[22] Information available at: <http://www.ibge.gov.br/home/default.php>. Accessed on August 18, 2016.

Brazilian Pay TV/Telecom Association [ABTA][23]). Although the share of homes with a TV set was already high in 2001, the rate continued to rise over the past couple of decades. The number of pay TV subscribers, in turn, recorded massive growth, especially as of the mid-2000s—rising from 4.1 million in 2005 to about 19 million in 2014.

Chart 10. Access To TV Devices And Pay TV Services In Brazilian Homes (2001-2014)



Source: ABTA and PNAD/IBGE. Prepared by Tendências.

This development is largely connected with Brazil's good economic performance in the period. Over the past decade the country recorded rather satisfying macroeconomic results, particularly in employment and income indicators. The decline in jobless rates to a historical low and the increase in formal jobs and household incomes spurred the demand for goods and services that, until then, could only be afforded by upper classes—case in point being pay TV.

To take advantage of the emerging "new middle class," several telephone operators have released satellite TV[24] (*"Direct to Home,"* or DTH) services of their own. Adopting a structure of lower monthly fees and pre-paid plans, often in promotional combos (including telephone, broadband Internet, and subscription TV services), made it possible to spread the DTH technology widely early in the current decade, especially among lower-income families.

However, when economic indicators began to deteriorate in mid-2013, signs of a slowdown started to appear in the pay TV market, whose subscriber base decreased

---

[23] Information available at: <http://www.abta.org.br/default.asp>. Accessed on August 18, 2016.
[24]DTH is the most popular pay TV system in Brazil. In its early days, the technology was adopted mainly in less populated areas (most of which also show lower income levels), where installing a cable TV grid was not advantageous. As income and employment indicators began to improve for the lower-income population, the system gained traction among the less affluent in larger cities, attracting new players to the segment.

2.7% in 2015 (the second decline on record for the industry since 1994[25]). In addition to the effects of the macroeconomic downturn, the pay TV industry has been affected by the proliferation of new entertainment services (such as VoD platforms), which will be addressed later.

Despite the dissemination of new means to access information and AV content, television still stands out as Brazilians' main vehicle of communication. A study conducted by the Brazilian Institute of Public Opinion and Statistics (IBOPE) at the request of the Social Communication Department of the President's Office found that the average time Brazilians spend watching television has increased in recent years, totaling 4 hr 31 min (Monday through Friday) in 2015—much longer than in 2014 (3 hr 29 min).[26]

Lastly, on the demand side, the television segment is characterized by its widely available content. In broadcast, nine networks compete for the audience, while in cable, viewers can chose from as much as 95 channels (not to mention their high-definition doubles)[27].

Rentals And Sales

This segment encompasses companies whose main activity is to sell or rent DVDs, Blu-ray discs, and other physical media containing audiovisual material to consumers. In recent years, this part of the industry has experienced a decline given the emergence of new business models (i.e. online streaming, pay-per-view, etc.). The advance of piracy, now facilitated by the widespread access to broadband Internet, has also contributed to the drop in sales and rentals of physical media.

2.4 Video On demand - VoD

Technological development, increased access to broadband Internet, and the proliferation of "smart" devices seen in recent years have paved the way for a new and revolutionary content distribution standard: video-on-demand (VoD) platforms. Though streaming technology, an unlimited number of videos may be distributed over the Internet at a low cost—a service generically known as *Over The Top* (OTT). Simultaneously, consumers are given the prerogative to choose what to watch, whenever and wherever they please, which has prompted major changes in their viewing preferences and habits. Lastly, the success of this formula has also had an impact on the very production of movies and television shows, as major new players join the sector.

---

[25] Besides 2015, the only year when the market showed recession was 2002 (-1.0%). That year, Brazil also faced an economic crisis and a crisis of confidence produced by the rise in uncertainties about the presidential race that would lead to Luis Inácio Lula da Silva's first term in office.

[26] Information available at: <http://www.secom.gov.br/atuacao/pesquisa/lista-de-pesquisas-quantitativas-e-qualitativas-de-contratos-atuais/pesquisa-brasileira-de-midia-pbm-2015.pdf>. Accessed on August 22, 2016.

[27] As per data from ANCINE for 2014, available at: <http://oca.ancine.gov.br/informes-anuais.htm>. Accessed on August 22, 2016.

VoD has thus led to profound changes across the audiovisual chain, giving rise to a new industry paradigm. In full expansion all over the world, including Brazil, VoD is currently the newest, most promising frontier for the AV sector.

2.4.1 Key Features Of The Industry

VoD platforms operate within one of two types of network: (a) a closed or dedicated network, provided by a private company; or (c) an open network, accessed by any user over the Internet. There are currently several VoD business models in operation, such as:

- Subscription VoD (or SVoD), where users pay a regular fee to access the content available on the platform;
- Transactional VoD (or TVoD), where users may browse through the platform's entire catalog for free, but have to pay an individual fee for whatever content they choose to play (movie, show, song, etc.) or transaction;
- Advertising VoD (or AdVoD), where the service is subscription-free (although it may or may not require registration), and the platform is funded by advertisers;
- Catch-up TV, where access to content is open to subscribers of another service with no extra charges, as is the case with networks that make regular programming content available on their VoD platform for a set period of time to add value to their brand.[28]

The world's main player in this market is Netflix, which operates under the SVoD model. Founded in the United States in 1997 as a modest DVD rental company, it is now a global video-on-demand provider, offering its services in nearly 200 countries. Its subscriber base adds up to 83 million worldwide—47 million in the U.S. alone[29]. This was one of the first companies to focus on streaming video technology to deliver on-demand content in large scale across the globe. One of its growth strategies was to systematically analyze its subscribers' viewing habits in real time in order to make specific suggestions to every profile, thus ensuring that they spent more time on the platform and became regular viewers. In 2011, the company began its international expansion, positioning itself as the first major player in numerous markets.

Brazil was Netflix's first "international market"—the company began operating in the country in September 2011[30]. The service started to gain traction particularly as of 2014. This more recent growth owes largely to the expansion of Brazil's broadband Internet network during the period, enabling a greater number of users to access the

---

[28] The term "TV Everywhere" is also used to describe this type of viewing window, when content can be accessed via a dedicated app on compatible devices, as long as the user is connected to the system.

[29] Available at: <http://www.economist.com/news/business/21705353-can-netflix-stay-atop-new-broadband-based-television-ecosystem-it-helped-create-streaming?frsc=dg%7Ca>. Accessed on August 26, 2016.

[30] See: <http://www.valor.com.br/empresas/1138912/netflix-expande-oferta-de-servico-na-al>. Accessed on July 5, 2016.

service. Adjustments made by Netflix itself also contributed, as the company broadened and adapted its content offerings to appeal to the local audience[31].

The innovations provided by Netflix and their impacts on AV demand soon attracted new competitors. On the one hand, in order to adapt to the new reality of VoD consumption, pay TV companies have been adopting a non-linear programming system based on VoD services, which are provided either via a cable system of via satellite. In Brazil, such is the case of NET, which released its video-on-demand platform NOW in April 2011. Initially restricted to subscribers of specific plans who lived in particular areas of São Paulo, today the service is available to customers all over the country, including via the NOW app, which was released in 2014 for smartphones, tablets, and PCs.

Other companies such as Vivo, Claro, and GVT, have also launched VoD platforms—Vivo Play, Claro Video, and GVT On Demand. In addition to the monthly subscriber charge, users must pay an additional fee to watch some of the movies on their catalogs[32].

Lately, companies that specialize in content production—such as TV networks—have also broken into this market. In Brazil, HBO Go, Fox Play Brasil, and Globosat Play are some examples of that, although they are currently available only for pay TV subscribers. However, following an international trend, Globosat has announced it will begin to market its on-demand platforms (such as Telecine Play and Telecine Zone) independently to non-subscribers of a pay TV plan. [33]

The domestic market also has other players[34], including Sony, one of the world's greatest media conglomerates. Operating under the AdVoD model, its platform Crackle offers users subscription-free access to an online catalog of movies and TV series. Electronic Sell Through (EST)—a sub-category of the TVoD model—, in turn, has Apple's iTunes as its most important representative.

The table below lists all 30 VoD providers currently operating in the country, according to data from ANCINE[35].

---

[31] Available at: http://www1.folha.uol.com.br/ilustrada/2016/10/1818877-presidente-da-netflix-lembra-tropecos-e-comenta-concorrencia-com-canais.shtml, accessed on 10/02/2016.

[32] Sky offers users the *Sky Online* service for an additional monthly fee and allows non-subscribers to pay for individual titles.

[33] Today, Telecine Play and the children's Telecine Zone are free for subscribers of pay TV plans that include the network's channels.

[34]ANCINE reports there are currently 30 video-on-demand services operating in the country. Available at: <https://www.ancine.gov.br/sala-imprensa/noticias/o-futuro-da-regulamenta-o-de-vod-ancine-apresenta-estudo-sobre-regula-o-do-v>. Accessed on August 25, 2016.

[35] Available at: <https://www.ancine.gov.br/sites/default/files/apresentacoes/GRAMADO_Rosana%20Alcantara.pdf>. Accessed on September 15, 2016.

Table 2. VoD Services and Providers in Brazil

SERVICES	COMPANIES	SERVICES	COMPANIES
iTunes Store	Apple	Now	Net Brasil
HBO Go	Brasil Programming	Netflix	Netflix
Clarovideo	Embratel	Oi TV	Oi Móvel
Enter Play	Enterplay	SmartVOD	Pixelate TV
WatchESPN	ESPN do Brasil	Sky Online	Sky Brasil
Fox Play	Fox Latin America	Crackle	Sony
On Demand GVT	Global Village Telecom	Sony - Video Unlimited	Sony
Globo.tv	Globopar	Vivo Play	Telefonica
+Bis	Globosat	Esporte Interativo Plus	TopSports Ventures
Globosat Play	Globosat	FishTV	Tunna
Philos	Globosat	Vevo	Vevo
Google Play	Google	Vimeo	Vimeo
Looke	Looke	Oldflix	WMW Comunicações
Xbox Video	Microsoft	Youtube	YouTube
NBA TV	NBA Media Ventures	Babidiboo.tv	Zero Um Digital

Source: ANCINE. Prepared by Tendências.

In the international market, Netflix also competes with VoD platforms that are not available in Brazil, such as Amazon Instant Video, owned by e-commerce giant Amazon, and Hulu, run by a consortium formed by Walt Disney Company, Twenty First Century Fox, Comcast, and the recently joined Time Warner Cable.

The versatility that VoD platforms provide players in this segment allows them to cater well to niche markets, with an endless portfolio of potential products and a vast range of devices with which users can access them. This creates business opportunities involving the widest assortment of services and content. PlayStation Video, which is geared toward videogame players, is an example of that. Originated in VoD platform Video Unlimited, which was released by Sony Entertainment Network in 2010, it offers a movie and game catalog that can be accessed from PlayStation consoles, as well as tablets, smartphones, and smart TVs.

The popularity of VoD services among consumers and their rapidly growing subscription numbers are largely explained by the greater power of choice their users enjoy compared with traditional distribution forms, which affords them greater diversity and comfort. As a result, the habit of sitting in front of the TV at a certain time of day to watch a specific show has quickly given way to a new form of consuming audiovisual content, wherein the user determines what to watch at what time, in what place, and even in which device.

A survey by IBOPE company Conecta released in October 2015[36] showed that 15% of Brazilian Internet users watch VoD content every day and 34% do so at least once a week. Another 10% claimed to consume this type of content less than once a week; 12% said they view it at least once a month; and 29% stated that they never watch VoD movies or TV shows[37].

---

[36] The survey was conducted in July 2015 with 1004 Internet users from all Brazilian regions.
[37] Available at: <http://www.ibope.com.br/pt-br/noticias/Paginas/34-dos-internautas-brasileiros-assistem-conte%C3%BAdo-on-demand-uma-vez-por-semana-.aspx>. Accessed on September 2, 2016.

Despite the pressure it puts on traditional AV distribution services, a recent global study on VoD undertaken by Nielsen[38] concluded that, currently, traditional and online services are not mutually exclusive, but rather complimentary, so much so that many pay TV subscribers also consume VoD content. What's more, the IBOPE survey mentioned in Section 2.3 showed that the audience has increased even for broadcast TV.

Nevertheless, the practice of watching content in a non-linear fashion, online or elsewhere, tends to overshadow that of watching linear TV programming. Also according to the Nielsen study, the long-term growth potential of these services is unlocked by the popularity of VoD, especially with younger audiences—generations Y (21-34 years old) and Z (15-20 years old). Furthermore, 27% of respondents said they planned to cancel their cable and/or satellite TV subscriptions and rely solely on online services.

This new reality has also brought about rapid changes in the advertising market, which has increasingly shifted away from traditional means of communication and toward newer media, VoD included. A global survey by McKinsey & Company showed that spending on advertising increased on average 16.1% a year in the world between 2009 and 2014, and the prospect was that the industry would continue to grow by on average 12.7% a year until 2019[39].

Another market that has been impacted by the proliferation VoD services is AV content production. Following a trend started by Netflix in 2013, VoD platforms began to invest in producing their own shows and movies. Consequently, in addition to the list of titles licensed by other studios and TV networks, they began to offer exclusive content, specifically produced for distribution over their platform. According to British publication The Economist, Netflix's budget for content production and licensing in 2016 was US$6 billion—three times that of HBO, the world's foremost producer of shows and movies for pay TV[40].

In addition to Netflix, Amazon and Hulu have also ventured into AV production. The former had several pilots recorded through Amazon Studios and has been releasing them on its platform. The ones users are most pleased with will go into production for a full season. Hulu, which also offers subscribers a number of exclusive shows, has invested in monitoring its series' streams to pinpoint which episodes are most talked about and shared on social media so that writers can tailor the plots to viewers' tastes[41]. Even PlayStation has started production on its own show, which will be offered as a bonus to subscribers of its service.

---

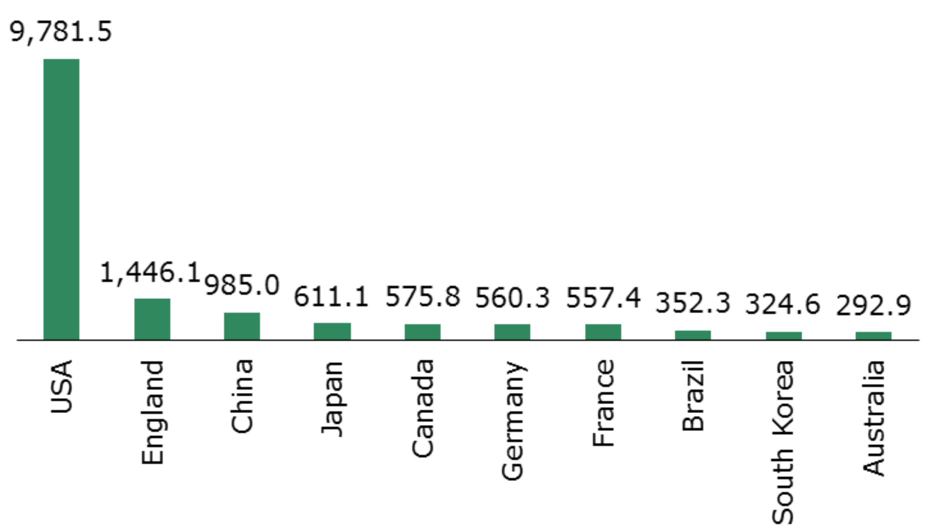
[38] Available at: <http://www.nielsen.com/br/pt/insights/reports/2016/Estudo-Global-Video-Sob-Demanda.html>. Accessed on August 24, 2016.
[39] McKinsey&Company Global Media Report 2015.
[40] Available at: <http://www.economist.com/news/business/21705353-can-netflix-stay-atop-new-broadband-based-television-ecosystem-it-helped-create-streaming?frsc=dg%7Ca>. Accessed on August 26, 2016.
[41] Available at: <http://oglobo.globo.com/cultura/revista-da-tv/seguindo-os-passos-da-netflix-empresas-como-amazon-hulu-playstation-lancam-suas-proprias-series-mas-maioria-nao-chega-ao-brasil-15910616#ixzz4J0Fw9ToI>. Accessed on August 27, 2016.

This trend has extended to Brazil as well. Netflix, for example, has recently produced its first original Brazilian show, which will soon be released. Only in the case of pay TV companies that venture into the VoD market is there currently a legal restriction to simultaneously operate on the content production front. This restriction is provided by statutory law 12485/2011[42], which prevents vertical concentration in the conditional access (CA) market production chain[43].

2.4.2 Data On The VoD Market

VoD is the fastest-growing segment of the AV industry. It is estimated that VoD services will generate US$18.3 billion in revenue worldwide in 2016, more than half of which should come from the United States. The chart below shows the ten largest VoD markets in the world, which, together, account for 84% of those revenues according to statistics portal Statista's VoD Research[44].

Chart 11. Revenue Generated By The Most Important VoD Markets in 2016 (Million USD)



Source: Statista. Prepared by Tendências.

Brazil stands out as the eighth VoD market in the world, with estimated earnings of US$352.3 million in 2016. It is also Latin America's largest VoD market, virtually twice as large as Mexico's and nearly three times that of Argentina in terms of revenue (estimated at US$188.4 million for the former and US$124.8 for the latter in 2016)[45].

---

[42]*"Art. 5. Control or ownership of more than 50% (fifty percent) of the total voting stock of companies that provide telecommunication services of public interest will not be allowed, directly, indirectly, or via a company under shared control, to concession- and permit-holding sound and image broadcast or production companies headquartered in Brazil, and they are strictly prohibited from directly operating those services."*

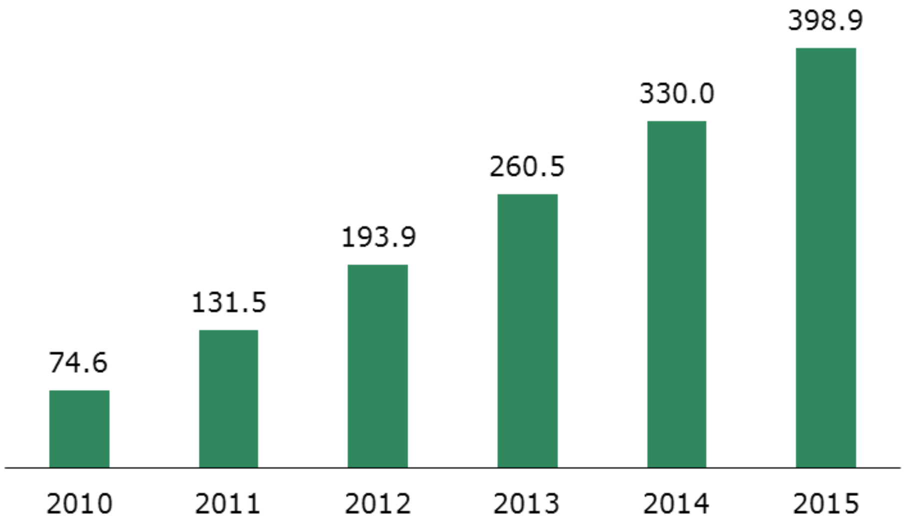
[43] This law forced NET to restructure its equity base, as Globo sold its shares and relinquished control of the company.

[44] As per ANCINE's presentation, available at: <https://www.ancine.gov.br/sites/default/files/apresentacoes/GRAMADO_Rosana%20Alcantara.pdf>. Accessed on September 15, 2016.

[45] Ditto.

Data from the PwC Global Entertainment and Media Outlook survey indicate that the revenue generated by Brazil's VoD market jumped from US$74.6 million in 2010 to $398.9 million in 2015. During this period, business models have branched out—whereas in 2010 100% of earnings came from services of dedicated networks, these accounted for only 75% in 2015. Also in 2015, subscriptions to these services, which started to increase in 2011, accounted for 21% of revenues, while the transactional model accounted for the other 4%[46].

Chart 12. VoD Market Performance In Brazil - Revenue (Million USD)



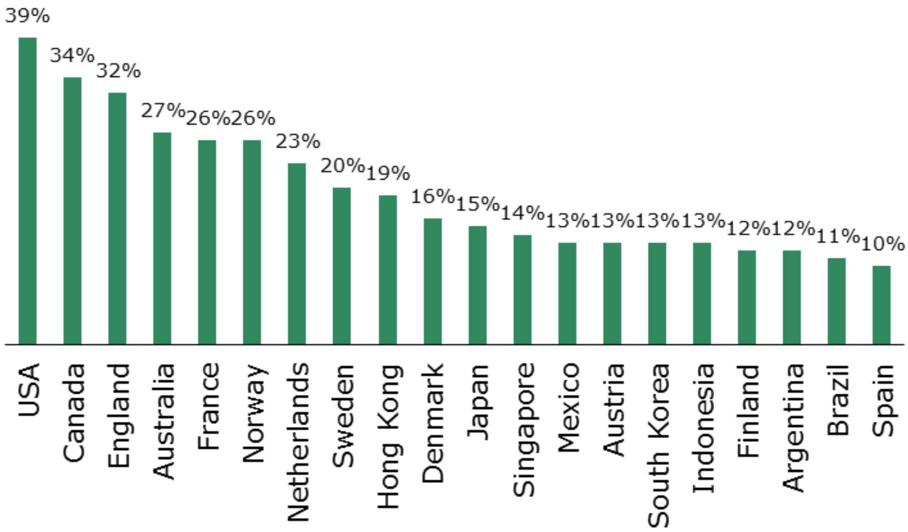
Source: PwC. Prepared by Tendências.

Because this is a fledgling market, VoD services still enjoy relatively low penetration when compared with other services such as pay TV. According to the above-mentioned research (Statista's), VoD penetration as a ratio between paying customers or active accounts and the general population over 16 years old is 20% or more in very few markets—in Brazil, it is only 11%. However, the hefty rates at which VoD has advanced suggest penetration of these services is likely to increase rapidly over the coming years. In Brazil, VoD shows great potential for growth. The prospect is that the proliferation of broadband Internet and the affordable prices of these services will help to expand access in different strata of the population.

---

[46] As per ANCINE's presentation, available at: <https://www.ancine.gov.br/sites/default/files/apresentacoes/GRAMADO_Rosana%20Alcantara.pdf>. Accessed on September 15, 2016.

Chart 13. Estimated VoD Penetration in Select Countries in 2016



Source: Statista. Prepared by Tendências.

With regard to the number of VoD providers, Brazil falls behind other markets, with a relatively low figure. According to data from ANCINE, there are currently 28 providers listed in the country, as shown in Table 2[47].

2.4.3 VoD Regulation in Brazil

The communication services segment has undergone material changes across the globe owing to the digital convergence phenomenon. Services such as landline and mobile telephony, television, and video, which used to be provided through different networks, are now increasingly being offered via the Internet through IP technology. As a result, OTT service providers have become more and more important suppliers of communication services all over the world. At the same time, in order to adapt to these changes, traditional communication companies have also progressively migrated to the *online* environment.

This new reality has translated into a series of regulatory challenges across the globe. Since providing OTT services involves transmitting massive amounts of data[48], one of the main questions that have emerged is net neutrality. According to this principle, similar services provided via the Internet should be treated equally, being subject to the same rules and conditions. However, services such as telephony and video or television distribution, for example, have originated in strikingly different environments, so much so that their regulatory frameworks are, in most cases, also disparate. Updating the regulatory framework for the communication industry, making it more appropriate to the technological convergence environment, is thus a necessary condition for these markets to develop and gain efficiency.

---

[47] As per ANCINE's presentation, available at: https://www.ancine.gov.br/sites/default/files/apresentacoes/GRAMADO_Rosana%20Alcantara.pdf, accessed on 09/15/2016.

[48] Estimates indicate that Netflix accounts for 30% of America's total data traffic during peak time, as stated in OECD's 2015 Economic Outlook.

In Brazil, the debate has gained more attention in recent years, and specific regulation for the VoD segment is currently under review. ANCINE, in tandem with the Superior Film Council[49], is expected to soon introduce a bill (which will later be sent to Congress) regulating the segment, for which reason it has conducted several studies on the subject.

As disclosed by the agency, of the principles that will underpin the VoD regulation, promoting national content stands out. Drawing on legislation from European countries[50], as well as Brazil's experience with the pay TV statute, a quota policy is likely to be proposed, requiring that catalogs have a minimum share of local content. This policy would be shored up by rules that ensure visual prominence to domestic titles in the services' access page. The goal is to call users' attention to national productions so as to promote their consumption and stir up interest in similar or related content. Additionally, the possibility of adopting funding measures, requiring media service providers to invest in the production or licensing of national content is also being considered[51].

Although the details of this bill still haven't been disclosed, signs provided by ANCINE as to how these instruments will be used draw our attention to some points.

Because this is a nascent, heavily technological, and still changing industry, it is important that, first and foremost, the appropriate environment be provided for it to flourish and advance. In order to do that, a regulatory approach ensuring free competition and the entry of new players in the market must be ensured. At the same time, this regulation needs to be adaptable and comprehensive, compatible with different business models and technological innovations.

If the VoD quota policy comes through, it is essential that consumer choice be considered and that other instruments—such as co-production incentives—be provided to encourage the production and consumption of quality local content.

It should also be pointed out that putting together a national catalog could entail a few challenges. Especially in the case of small, independent-studio productions, the costs involved in converting media files to a streamable format may be a hassle. As for larger, established domestic producers, they could deny licensing content to VoD providers for seeing them as competitors.

Lawmakers are still deliberating on how VoD services will be taxed. One critical point they must determine is how CONDECINE [Brazil's film industry tax] will be charged. Today, this duty is levied on each title on catalog, regardless of economic results, and, according to Normative Ruling 105, issued by ANCINE in July of 2012, VoD services are subject to these charges. But, although in theory this rule already applies

---

[49] According to Article 1 of Decree 4858 from 10/13/2003, the Superior Film Council, created by Executive Order 2228-1 from September 6, 2001, is a collective body within the basic structure of the Ministry of Culture designed to formulate and implement active public policies to advance Brazil's filmmaking industry.
[50] The countries mentioned by ANCINE in its presentations on this topic include France, Belgium, Spain, Slovakia, Italy, and Germany. Available at: https://www.ancine.gov.br/sites/default/files/apresentacoes/GRAMADO_Rosana%20Alcantara.pdf, accessed on 09/15/2016.
[51] Available at: https://www.ancine.gov.br/publicacoes/apresentacoes, accessed on 09/02/2016.

to the VoD segment, in practice it has no effect. If actually enforced, it would represent a major hurdle, especially to smaller media providers, not to mention the risk of restricting the number and the variety of titles offered. The Superior Film Council thus acknowledges the need to develop a new tax system, allowing VoD services to operate sustainably in all of its different forms[52].

Defining tax and regulatory obligations for VoD providers also involves other drawbacks. As per a document released by the Superior Film Council in December 2015[53], video-on-demand services involve a comprehensive and diverse market, where content providers have very distinct profiles, and addressing these differences may require determining different obligations according to configuration and economic stature. Also challenging in that respect is the extraterritorial quality of the service, since the nature of over-the-top (OTT) content provision allows it to take place from overseas. Along these lines, it is difficult to ensure that they conform to Brazilian legislation, a prerequisite for maintaining a competitive environment for domestic providers.

What's more, one of the most attractive features of VoD platforms—and which helps to explain their rapid growth—is precisely their affordable prices. By providing quality service, with widely varied content at affordable prices, VoD platforms have become an appealing alternative for consumers. If the burden of new tax rules leads to a significant bump in VoD prices, this could hold back the development of this market in Brazil and, conversely, create incentives for an upswing in the consumption of unlicensed, illegally provided content, particularly through piracy websites.

In view of these risks, before being approved, regulatory devices like this must first be carefully assessed for the impacts on the behavior of users and providers each one of them entails.

Seeing as the emergence of VoD is a recent phenomenon and the changes it spawned are still ongoing, regulatory measures that are too restrictive must be avoided, under penalty of undermining or impeding the development of this innovative market, which has significantly advanced the AV industry.

The regulation must instead be able to simulate investments in the VoD segment, creating the appropriate environment to foster its development. The first aspect of this environment is a broader market, which is key to ensure new opportunities for Brazilian production and content development companies and is precisely one of the goals of the new regulation being proposed, as ANCINE has reiterated on several occasions.

As the VoD segment grows in Brazil, and seeing as this is a competitive market, it is to be expected that domestic productions also gain increasingly more space, so that the existing demand for this type of content in the country be satisfied. The fact that,

---

52 Available at: http://www.ancine.gov.br/sites/default/files/CSC%20-%20Consolida%C3%A7%C3%A3o%20Desafios%20VoD%2017%2012%2015_1.pdf, accessed on 09/02/2016.

53 Ditto.

between 2013 and 2016, Netflix doubled its offering of national titles to the Brazilian market is an indication of that[54]. Along these lines, because they are comparatively inexpensive for content providers and interfere less with the operation of the market, prominence rules seem like a plausible way to ensure greater visibility to national productions.

In short, there is a risk that Brazil's future VoD regulation will introduce measures that restrict the development of this market, along the lines of the quota policy and tax increases. In this case, players in the Brazilian AV market would be the ones to lose—and they are the ones the framework is originally designed to protect.

The following Box will briefly discuss the potential adverse effects of interventionist measures on competitive markets, using the "Computer Act" as an example to show how the results of this type of policy may be the opposite of those it intends to produce.

[54] Available at: http://www1.folha.uol.com.br/ilustrada/2016/10/1818877-presidente-da-netflix-lembra-tropecos-e-comenta-concorrencia-com-canais.shtml, accessed on 02/10/2016.

Box 2: Potential Costs of Market Interventions

One of the main takeaways from Economic Theory is the realization that competitive markets[1]—where there are no controls on how prices are determined or how much is produced or desired—yield effective results from society's standpoint. Along these lines, adopting policies that regulate price and amount (quotas) is recommended only for some types of industry, where market failures may cause social damage. In competitive markets, conversely, government mismanagement could lead to more losses than gains for society, often producing the opposite results from those intended.

Broadly speaking, the purpose of economic regulation is to make the market more efficient. Therefore, prices, tariffs, and quotas must be set with extreme caution, grounded on a studious analysis of the costs and benefits of this policy for the population at large, as opposed to only a particular group.

While the damaging consequences of public mismanagement on the markets have been well documented, including both theoretical and empirical demonstrations, initiatives like that still exist. It is still common, especially in developing countries, to adopt price-control and quota policies (among others) in an effort to obtain a particular economic result, often producing negative effects for the economy and the welfare of the population.

Brazil has a long history of government interventions that had negative consequences for the economy. One such case, which has been extensively documented, was the so-called "Computer Act"[2] introduced in the mid-1980s. This law was designed to protect the "nascent" Brazilian tech industry, offering market reserve (that is, import protection) for domestic companies across nearly all computer-related products and services. The law forbade multinational companies from producing computers and computer parts in Brazil, and imposed tariffs and/or quotas on end-user computers or the parts with which they were assembled.

This protection was in force until the early 1990s, and did not fulfill its purpose of fostering an independent national industry that operated at competitive prices. On the downside, preventing fairly-priced imports of high-end components and concentrating market power in the hands of end suppliers led the industry to stagnation and caused great damage—especially for consumers. In a study on this industry, Luzio and Greenstein (1995)[3] looked into the costs and benefits of the adopted policy In essence, the authors concluded that the "Computer Act" set back the industry by about three years compared with its international counterparts in terms of technical advancement and the products' price-performance ratios.

[1]Generally speaking, in order for a market to be considered competitive, it must have a large number of suppliers and customers without any one of them having the power to affect the price of the product. Furthermore, in a competitive market there is no major barrier to the entry of new competition, and economic agents have unrestricted access to information.
[2] Act 7232, from October 29, 1984.
[3]Available at: http://mcadams.posc.mu.edu/econ/Luzio,%2520Brazilian%2520Microcomputers.pdf. Accessed on September 30, 2016.

3 Analysis Of The Brazilian Audiovisual Industry

The purpose of this section is to contextualize the AV industry in Brazil. First, we will explore aspects relating to employment and wages in the industry, also focusing on the production, distribution, and screening segments. Next, as a way of gauging its relevance, the impacts of the industry on employment, value added, and tax revenue will be described and examined based on the Input-Output Model (IOM).

The trends of foreign trade in the industry will also be described in the following pages, as well as the taxes incurred throughout the production chain in Brazil. It should be stressed that this section includes an update of the information provided in the previous study, including more recent data available on the government's RAIS. Another change concerns the IOM we used, as detailed in Appendix I.

3.1 Employment, Wages, And Payroll

What follows is a characterization of the AV industry in terms of employment, salaries, and payroll. To that end, we made use of the latest figures made available by the Ministry of Labor and Employment[55] in its Annual List of Social Information (RAIS), which is updated on a regular basis. Because of this feature, the figures here presented not only complement those considered in the previous study—this time covering a period that ends in 2014—, but also fine-tune them[56].

The audiovisual industry employed next to 169,000 people in 2014, accounting for 0.30% of all formal job contracts recorded for the services sector that year. This share is comparable to that of other traditional segments, such as printing[57], tourism, sports, and the hotel industry.

The following chart shows how the number of people employed in the AV industry and in other sectors of the economy has developed. While the audiovisual industry has created more jobs (up from 132,000 in 2007 to 169,000 in 2014, or 27%), its share of jobs in the service sector as a whole remained virtually unchanged, ticking down from 0.34% to 0.30% during the period at issue. This indicates that the audiovisual segment grew at a very similar pace as the services sector at large. Generally speaking, the same can be said about the other surveyed segments, in that their share of jobs within the services sector recorded no significant change.

[55] Because these are official figures, only jobs with a formal contract are accounted for. See Appendix II.
[56] In order to deliver an analysis that more accurately reflects the current state of the industry, we chose to use the more comprehensive year-round employment data, as opposed to the number of active employment contracts on December 31. Likewise, the average salary for each year was preferred over the current salary in the month of December.
[57] The printing industry is made up of activities such as editing for books, newspapers, magazines, and other publications, as per section 58 of CNAE.

Chart 14. People Employed In Audiovisual, Printing, Tourism, Hotel, And Sports Industries

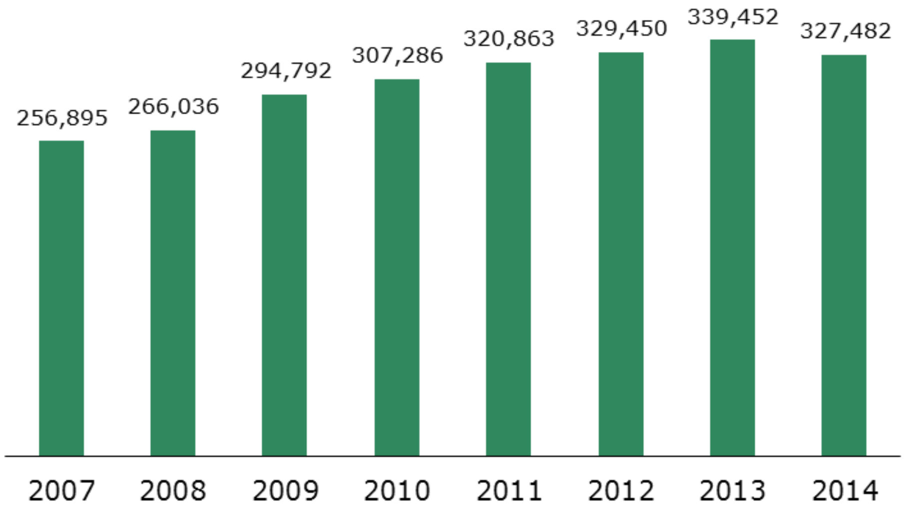
Source: RAIS/MTE (Microdata). Prepared by Tendências.

With regard to the indirect effect of the AV industry on job creation, the estimated multiplying factor is 2.94[58]. This means that, for every job created in the AV segment, 1.94 jobs are created in other sectors of the economy as a result of the ensuing demand for input. The other services segments averaged 1.96, being that audiovisual ranks 4th among the segments (33 overall) with the highest multiplying factors in the input-output analysis.

The following chart shows how indirect job creation by the audiovisual industry has performed over time. In 2014, the segment spawned 327,482 indirect jobs, exceeding the 168,880 direct jobs created in the period.

[58] This figure was obtained using the Input-Output Model (IOM). For more detailed information about the methodology, see Appendix I.

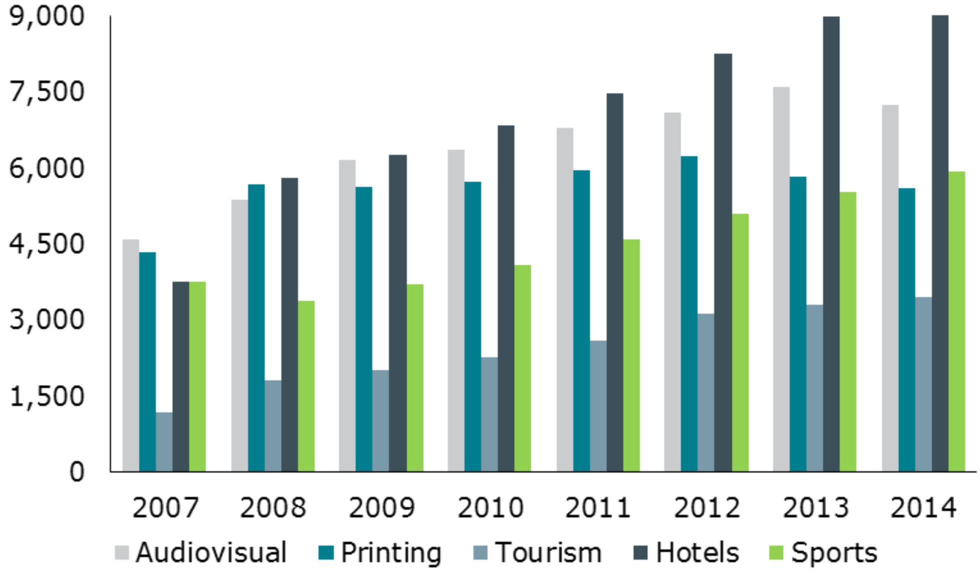
Chart 15. Indirect Jobs



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Jobs Created By The AV Industry Per Year

Comparing payrolls across segments adds a new dimension to the audiovisual industry. Since this industry's average monthly pay is relatively lower, it becomes more relevant when compared to those of other industries. The AV segment generated 0.51% of the services sector payroll in 2014, versus 0.24% generated by tourism and 0.68% by the hotel industry. Its payroll in 2014 amounted to roughly R$7.2 billion, versus R$4.6 billion in 2007, accounting for an increase of 58% in real terms, as shown in greater detail in the following chart.

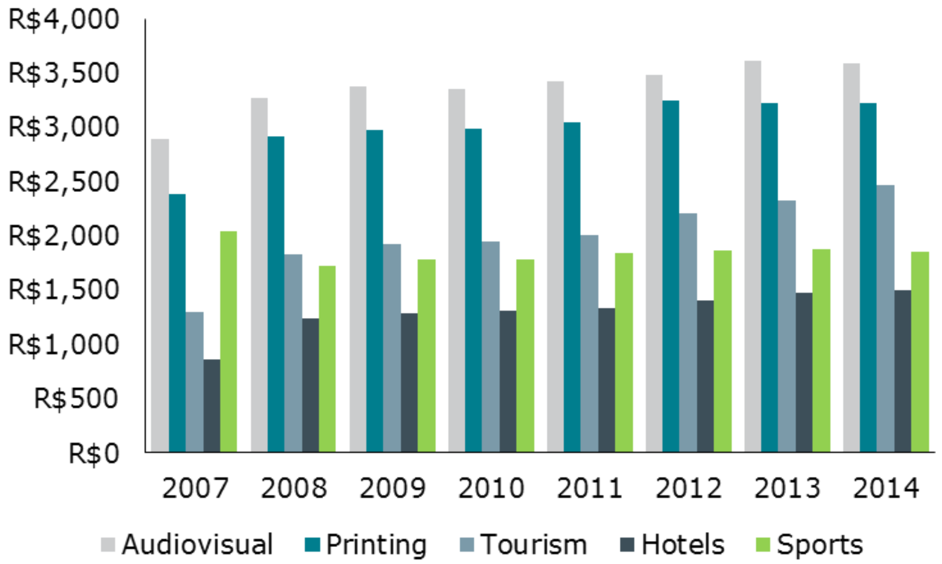
Chart 16. Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: The payroll was calculated based on the average monthly salary for every year, updated to prices in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

The average monthly salary in the audiovisual industry exceeds those of the other industries in the analyzed period, totaling R$3,582 in 2014. The average salary in the services sector as a whole, in turn, was R$ 2,084, as shown below.

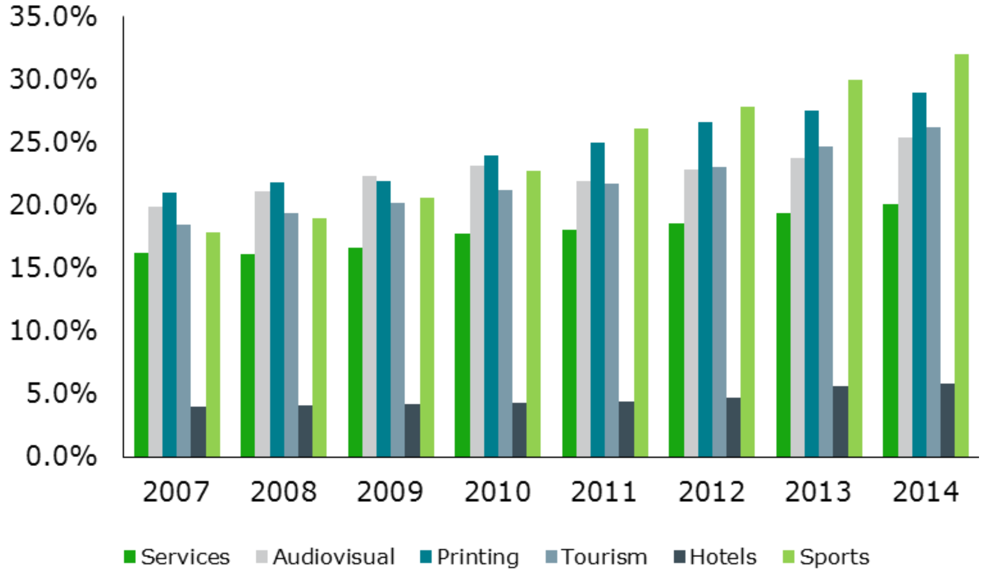
Chart 17. Average Salary (BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Salaries were calculated based on the employees' average monthly pay every year, updated to prices in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

The following chart shows that 20.2% of services sector workers had an undergraduate degree in 2014, a rate that came to 25.4% among people employed in the AV industry. This was the fourth highest rate among services segments that year.

Chart 18. Workers With An Undergraduate Degree (%)



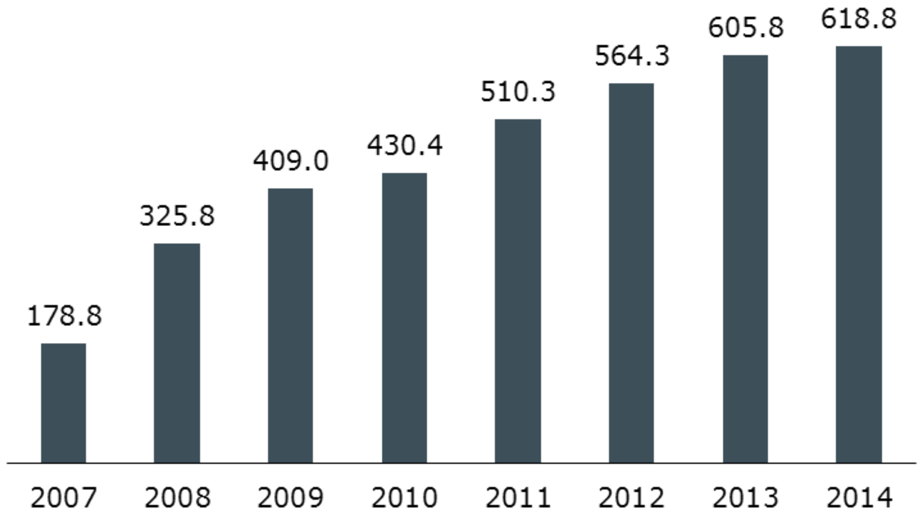
Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This rate was calculated based on the number of employed people that year.

Next, we will proceed to analyzing each segment of the audiovisual industry in greater detail.

3.1.1 Production

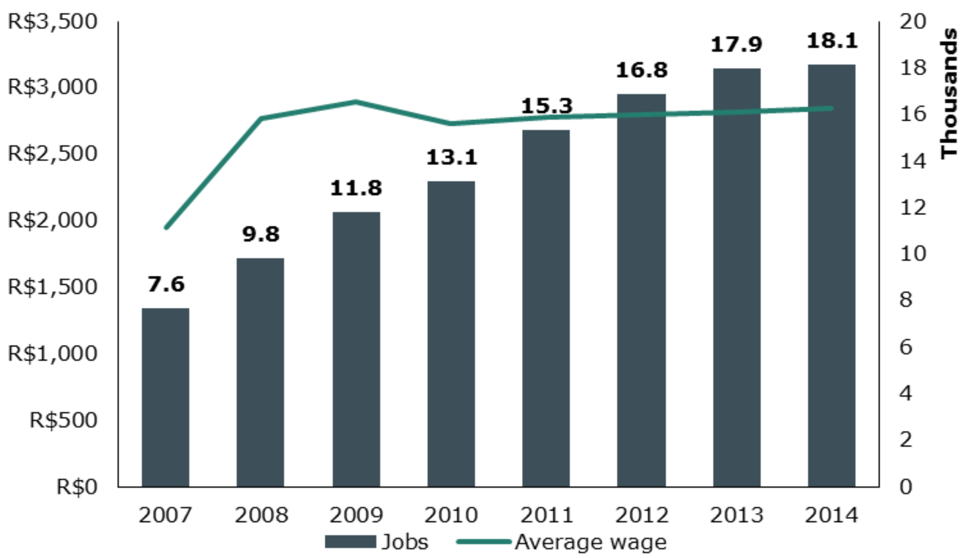
This segment includes both production and post-production activities [59], encompassing the links that precede distribution in the value chain. The charts below show payroll, employment, and average salary figures for the segment. Payroll and salary variables have been adjusted by the IPCA to prices of July 2016.

Chart 19. Production Segment—Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in the given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 20. Production Segment—Jobs And Average Salary (BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: These variables refer to the number of employees in the given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

[59] The following activities (CNAE subclasses) were considered constituent parts of the production segment: film studios (5911-1/01); promotional film production (5911-1/02); previously unspecified production activities (5911-1/99); dubbing activities (5912-0/01); sound mixing activities in audiovisual production (5912-0/02); and previously unspecified post-production activities (5912-0/99).

Employment in this segment grew on average 8.4% a year between 2010 and 2014, far outpacing the AV industry as a whole (1.6% pa.) and the Brazilian economy at large (4.8% pa.). Likewise, its payroll grew at a similar pace (19.4% pa.), also surpassing the both the AV industry (6.75% pa.) and the rest of the economy (13.6% pa.). Note also that its employees' real average salary escalated.

With regard to employee education, we found that 30% of workers in the segment have an undergraduate degree, more than the average for the AV industry (25.4%) and for the economy at large (15.7%).

In terms of geographical distribution, content production takes place predominantly southeast of the country (64.1% of jobs in 2014), where most of the major studios are based. When we consider the segment's payroll, this concentration is even more striking: 74.6% of the payroll for AV content production in Brazil comes from the southeast, which indicates that employees in this area receive higher pay.

3.1.2 Distribution

Just as production, the distribution[60] segment saw an increase in payrolls between 2007 and 2014. This development was accompanied by a decrease in the number of employees in the segment, while real salaries showed a steep increase (12.5% pa.). In other words, the segment has created fewer jobs, but paid its employees more. The reproduction segment[61], in turn, saw an upturn in payroll (1.3% pa.), employment (0.7% pa.), and real salaries (0.6% pa.).

In regard to employee education, the distribution segment boasts a large share of workers with an undergraduate degree (43%). In the reproduction segment, the rate falls to 19%.

Distribution companies also perform the bulk of their operations in the southeast (74.2% of jobs and 92.7% of payroll in 2014), where the greatest consumer market for AV content (TV networks and film theater companies) is located. Reproduction companies, in turn, operate mostly north[62] (51.1% of jobs and 44.4% of payroll in 2014) and south (24.4% and 42.7%) of the country.

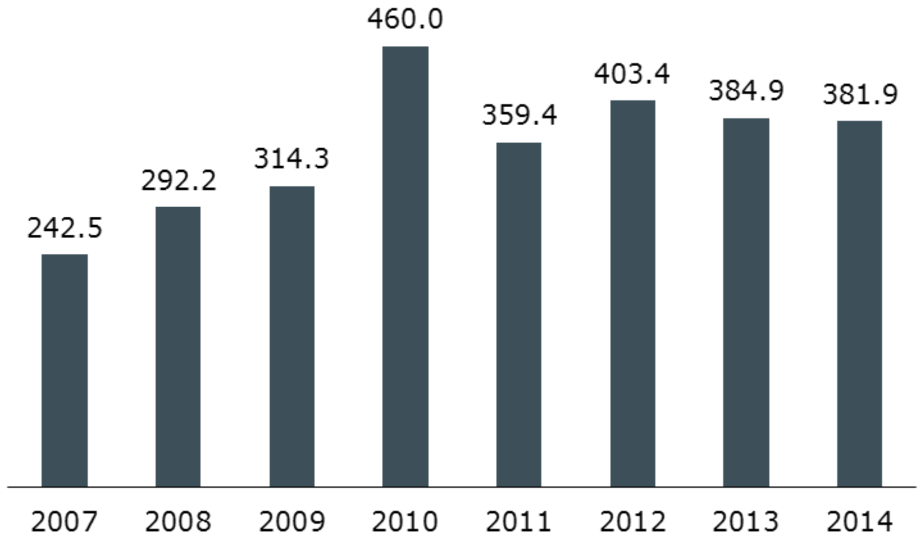
---

[60] The distribution segment encompasses the following activities (CNAE subclasses): film, video, and TV show distribution (5913-8/00), as well as programming activities (6022-5/01).

[61] The segment here described as "reproduction" refers to replicating original masters in consumer formats, such as DVDs, Blu-ray discs, and negative film for (analog) theater screening. This segment, which immediately precedes that of distribution, is defined by CNAE's subclass 1830-0/02.

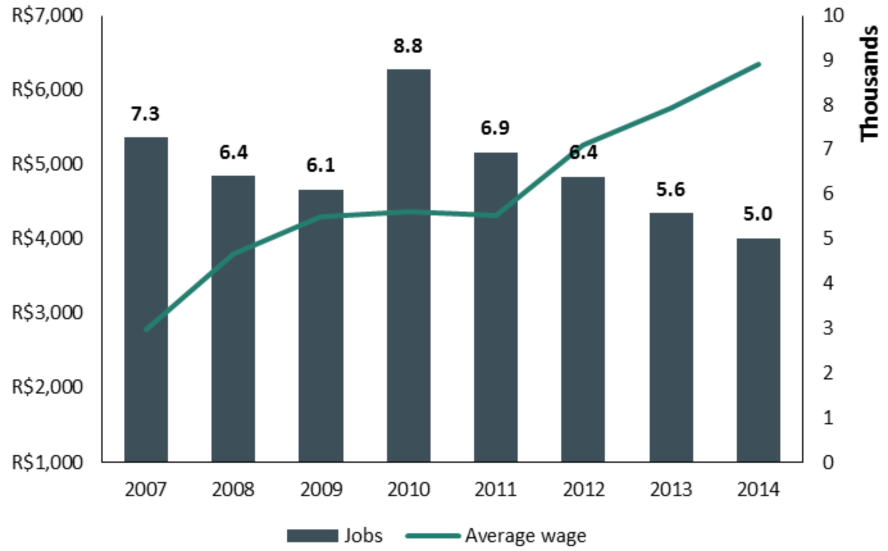
[62] The performance in the north is an effect of the Free Economic Zone of Manaus.

Chart 21. Distribution Segment—Payroll (Million BRL in July 2016)



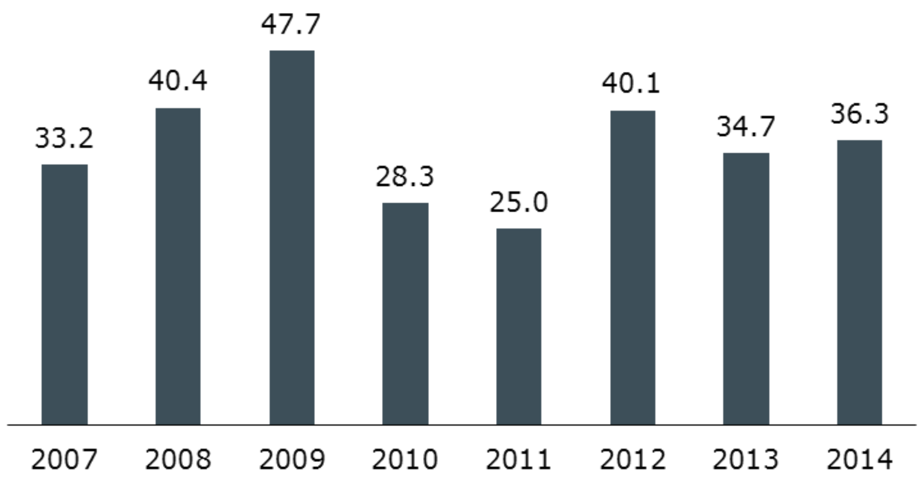
Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in the given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 22. Distribution Segment—Jobs And Average Salary (BRL in July 2016)



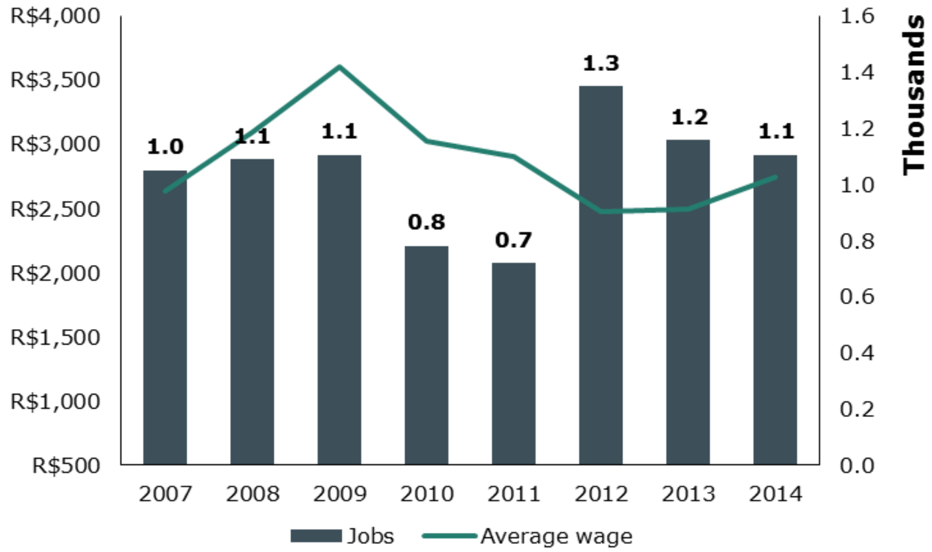
Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This is the number of employees in the segment in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 23. Reproduction Segment—Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 24. Reproduction Segment—Jobs And Average Salary (BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This is the number of employees in the segment in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

3.1.3 Screening

Theater Screening

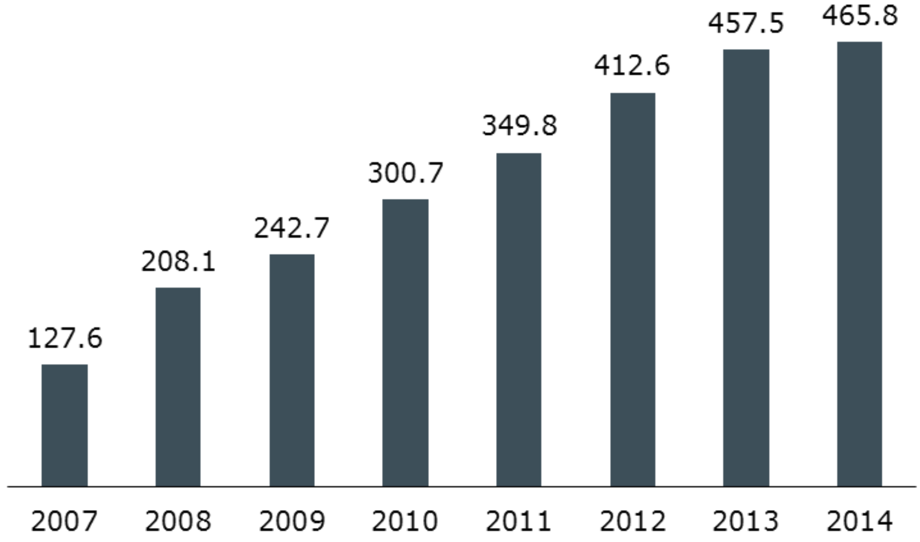
This segment involves, above all, the showing of films in dedicated theaters. In Brazil, the five major screening companies combined owned 1,392 screening venues in 2015, accounting for 46.3% of the country's theaters[63], according to data from

[63] Information available at: <http://oca.ANCINE.gov.br/exibicao.htm>. Accessed on September 8, 2016. When compared to those of other countries, this segment in Brazil is highly fragmented (made up of several small companies).

ANCINE. This segment's employment and payroll indicators also recorded significant growth, having gone up on average 11.1% pa. and 20.3% pa., respectively, since 2007. In addition to that, real salaries have also increased in recent years, showing an average rate of 8.3% a year. However, despite this remarkable growth, only about 4% of this segment's employees have an undergraduate degree.[64]

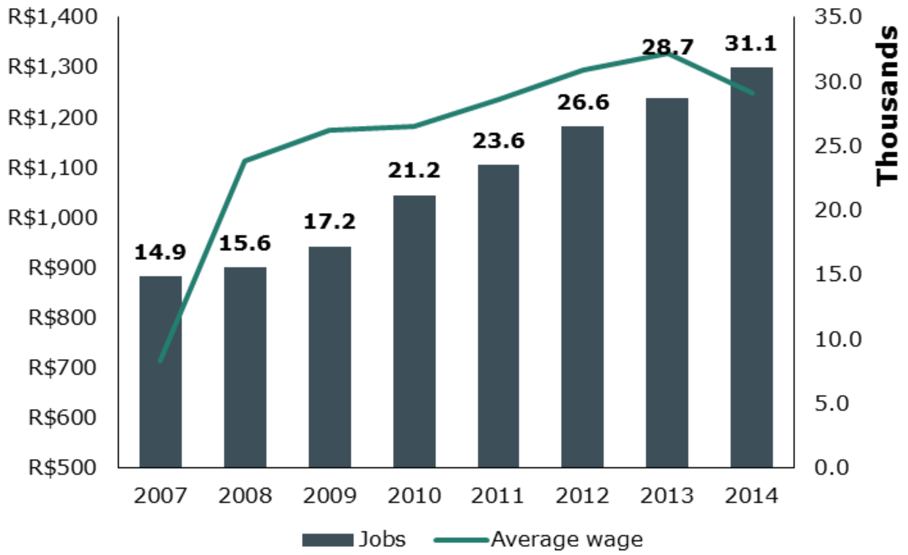
In geographical terms, most film theaters are located in the southeast, where they have 61.0% of their jobs and 63.9% of their payroll.

Chart 25. Film Screening Segment—Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 26. Film Screening Segment—Employment And Average Salary (BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This is the number of employees in the segment in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

---

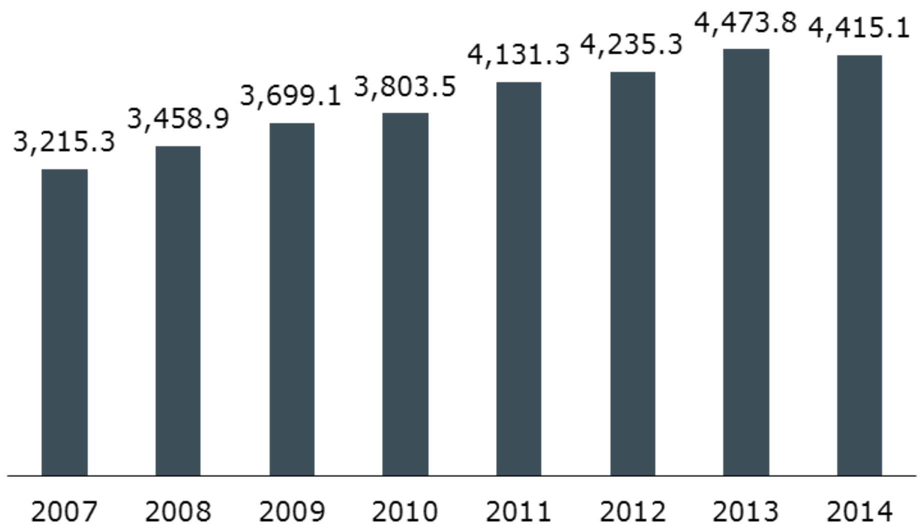
[64] Reference to CNAE subclass 5914-6/00: film screening activities.

Television

This category encompasses the operation of television studios and the broadcasting of programming to audiences in general, including the activities of affiliate networks.

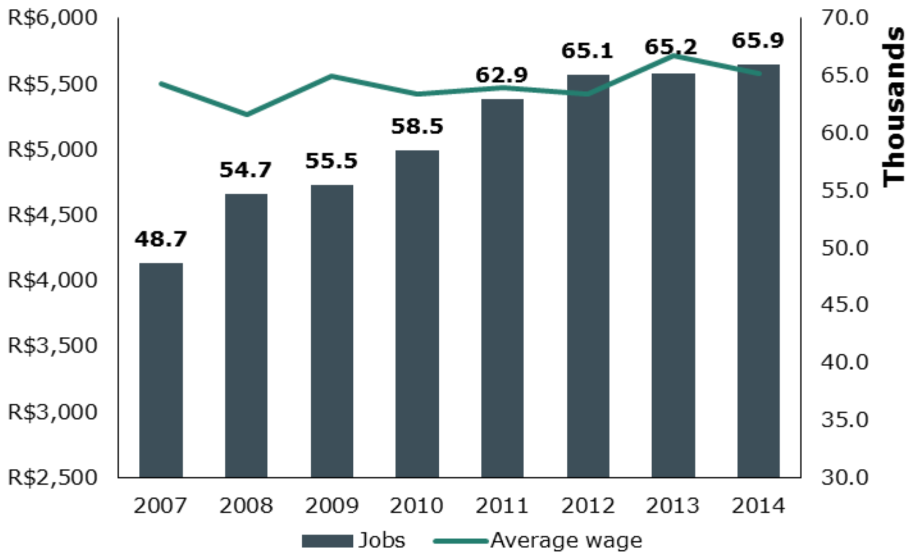
Between 2007 and 2014, payroll and jobs in this segment, or, more specifically, in its broadcast subset[65], were up respectively 4.6% and 4.4% a year, following the same trend as the AV industry as a whole. With regard to employee education, 41% had an undergraduate degree—more than the average for the AV sector (25.4%).

Chart 27. Broadcast TV Segment—Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 28. Broadcast TV Segment—Jobs And Average Salary (BRL in July 2016)



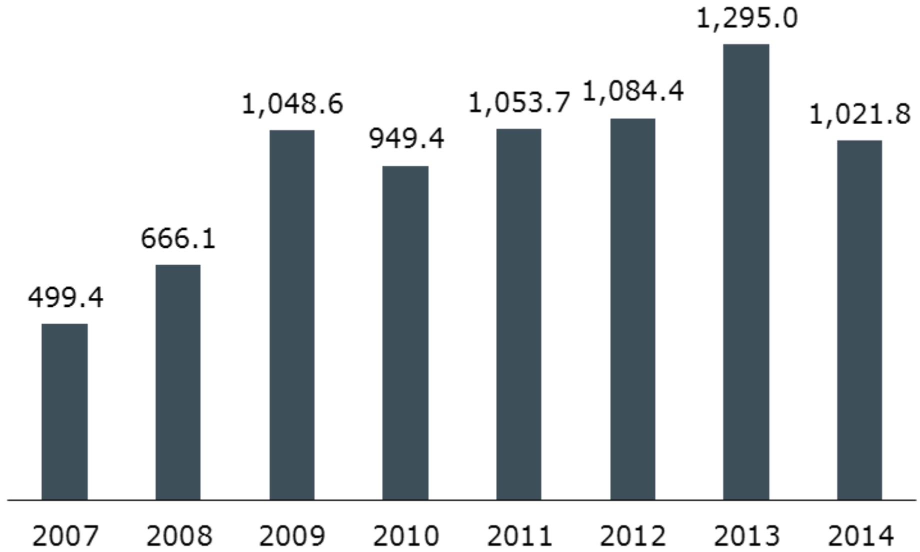
Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This is the number of employees in the segment in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

---

[65] Reference to CNAE subclass 6021-7/00: broadcast television activities.

In the case of pay TV[66], according to Brazil's National Telecommunications Agency (Anatel), the number of subscribers increased 270% between 2007 and 2014, which implies the segment is still growing in the country. During that same period, payrolls in the industry increased 10.8% a year, while an upsurge in the level of jobs was also recorded (7.5% a year). In 2014, 19% of employees in the segment had an undergraduate degree.[67]

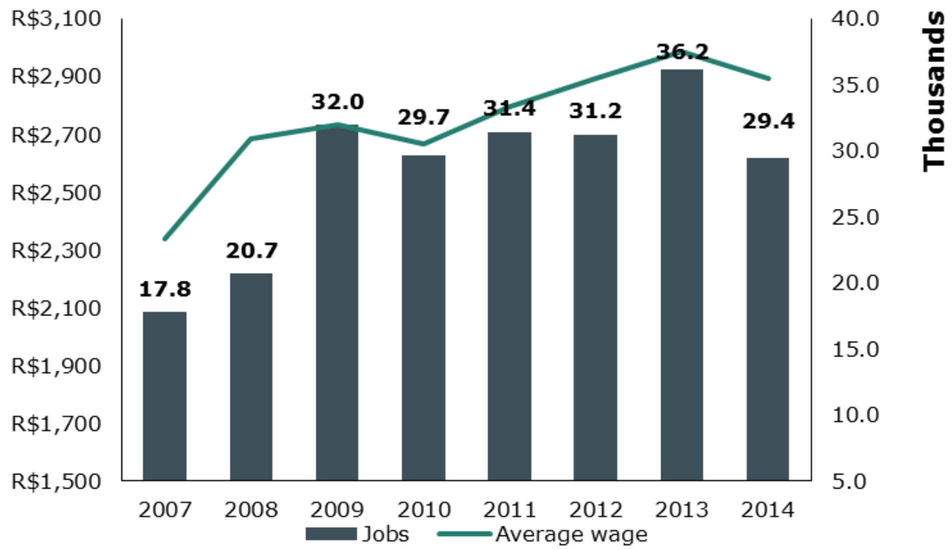
Chart 29. Pay TV Segment—Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

[66] The following activities (CNAE subcategories) were considered as constituent parts of this segment: cable television operators (6141-8/00); microwave television system operators (6142-6/00); satellite television operators (6143-4/00); and pay-television activities, excluding programming (6022-5/02).
[67] In December 2007, Brazil had 5.3 million pay TV subscribers. By 2014, the subscriber base had increased to 19.6 million. Data available at <http://www.abta.org.br/dados_do_setor.asp>. Accessed on September 30, 2016.

Chart 30. Pay TV Segment—Jobs And Average Salary (BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This is the number of employees in the segment in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

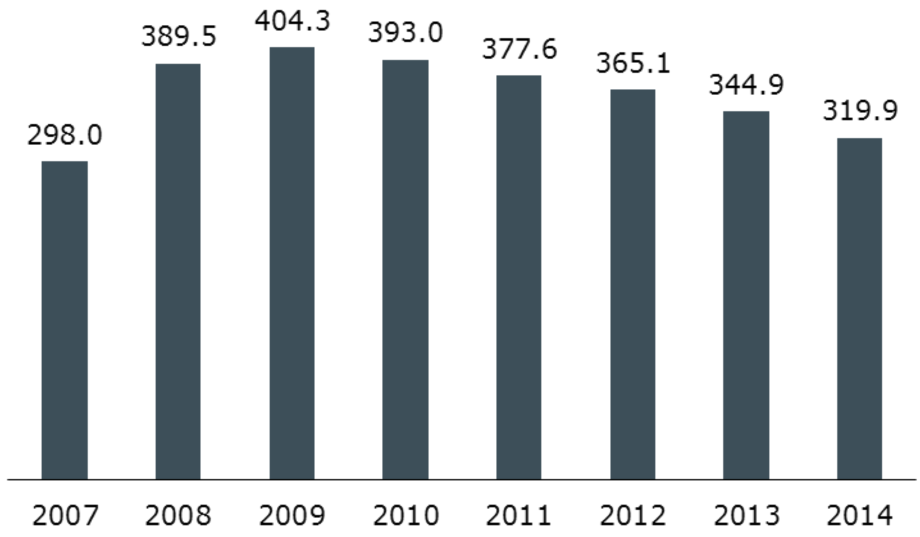
Companies in this segment are mostly based southeast of the country (home to 58.6% of jobs in broadcast TV and 66.3% in pay TV in 2014). The disparity in payroll is even greater, seeing as the area accounts for 74.1% of earnings from broadcast TV and 70.9% of those from pay TV.

Rentals And Sales

Between 2007 and 2014, jobs in the sales and rentals segment[68] decreased 9% a year, whereas payrolls increased only 1% a year. This branch of the industry is faced with serious impediments to growth, most notably the competition with pirated products and the emergence of other media-sharing platforms (such as VoD). The segment is also largely based in the southeast, where there are records for 63.1% of its jobs and 69.6% of its payroll. In addition, only a small percentage of its employees (6%) have completed their undergraduate studies.

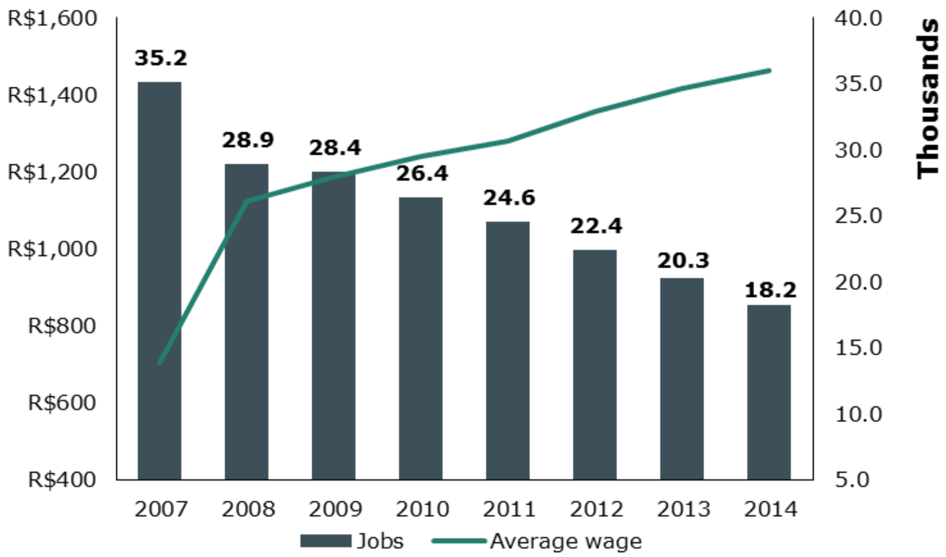
[68] The following activities (CNAE sub-categories) were considered the constituent parts of this segment: rentals of video tapes, DVDs, and similar media (7722-5/00); retail sales of films, CDs, DVDs, and magnetic tapes (4649-4/07); and wholesale sales of vinyl discs, CDs, DVDs, and magnetic tapes (4762-8/00).

Chart 31. Sales And Rentals Segment—Payroll (Million BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Payroll has been calculated based on the number of employees and their average monthly pay in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

Chart 32. Sales And Rentals Segment—Jobs And Average Salary (BRL in July 2016)

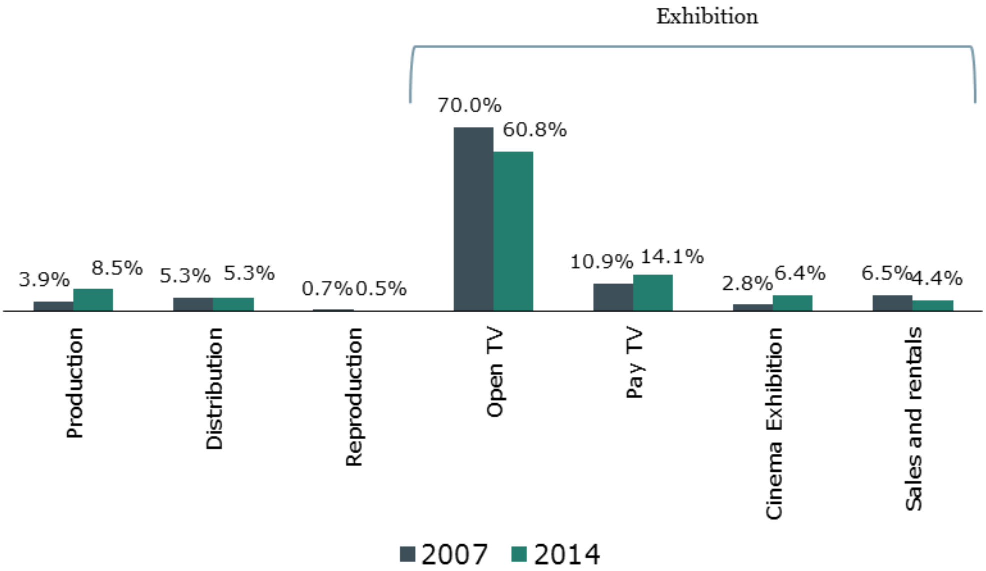


Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: This is the number of employees in the segment in every given year. Figures have been adjusted to current value in July 2016 using IBGE's Broad Consumer Price Index (IPCA).

3.1.4 Segments In Contrast

Having analyzed each segment of the AV industry, we can now compare their economic importance with regard to direct formal employment, payroll, and average salary. In terms of payroll, broadcast TV accounted for 70% of the salaries paid in 2007 and 60.8% of those paid in 2014. On the same terms, the second most important segment is pay TV, with a share of 14.1% in 2014, down from 10.9% in 2007. The sales and rentals segment saw a downturn in the period, while production still accounted for less than 10% of the payroll, although it advanced during that time. The following chart shows how the share of each segment performed over time.

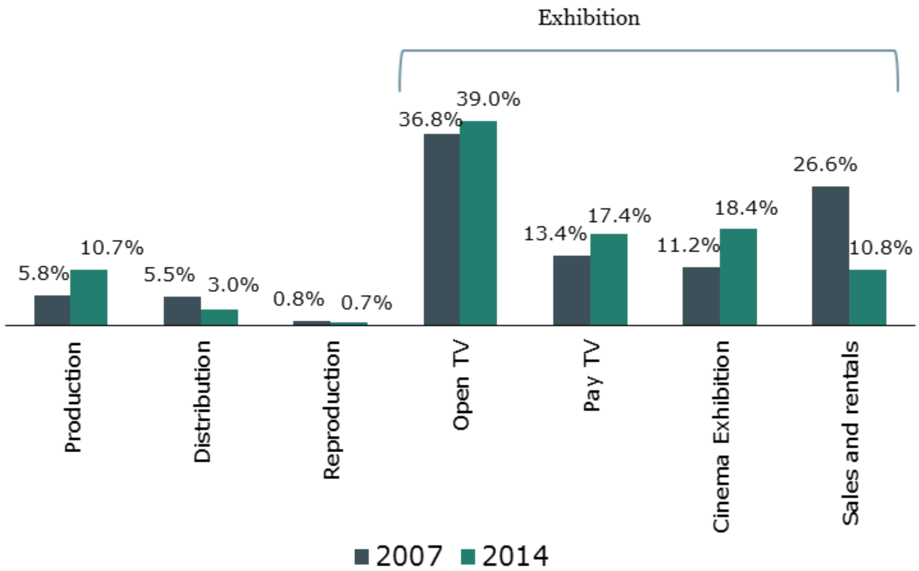
Chart 33. Audiovisual Industry Payroll By Segment (%) In 2007 And 2014



Source: RAIS/MTE (Microdata). Prepared by Tendências.

A similar picture is seen when we analyze the share of each segment in the number of jobs within the AV industry. As shown in the chart below, the screening and production segments saw their shares grow substantially; unlike the sales and rentals segment and the distribution segment, whose shares recorded a steep decline.

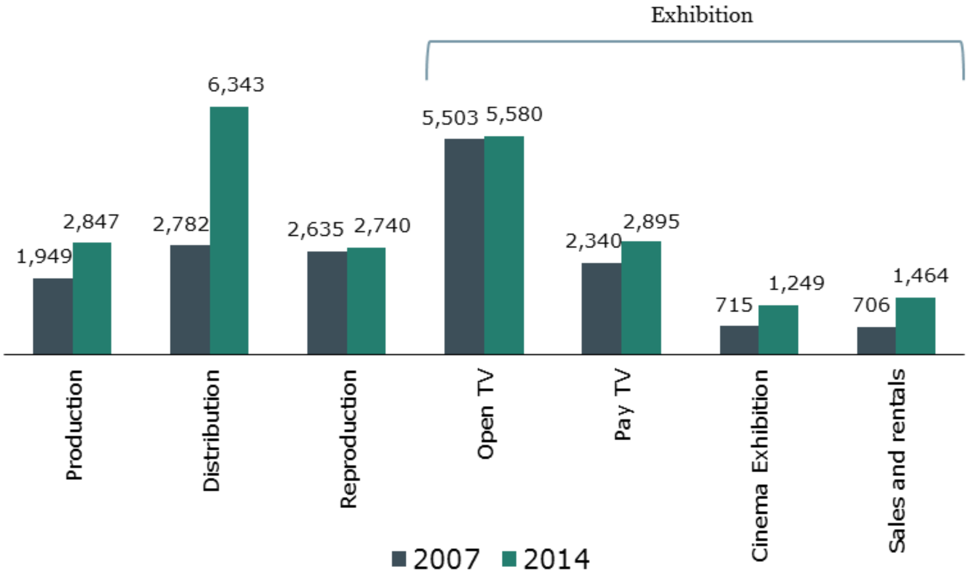
Chart 34. Formal Jobs In The Audiovisual Industry By Segment (%) In 2007 And 2014



Source: RAIS/MTE (Microdata). Prepared by Tendências.

Lastly, the development in real salaries for each segment is detailed in the chart below. In terms of performance, the distribution segment stands out, seeing that its salaries soared by over 128% in the period. When we look at earnings in absolute terms, the theater screening segment and the sales & rentals segment showed the lowest salaries, whereas the highest average pay was recorded in distribution and broadcast TV.

Chart 35. Average Salary In The AV Industry By Segment In 2007 And 2014 (BRL in July 2016)



Source: RAIS/MTE (Microdata). Prepared by Tendências.

The above-presented data show that TV-related segments are the most relevant in terms of job creation and payroll.

3.2 Value Added, Production, And Tax Revenue

This section will provide an estimation of the AV industry stature in terms of value added[69], production, and revenue. In order to do that, the Input-Output Model (IOM) from 2013 was used, seeing that, in addition to including more updated data than that of 2009 (applied in the previous study), this matrix was set up using figures from Brazil's new National Accounts System—Reference 2010. As a result, it has a more detailed breakdown by industry[70], based on the National Classification of Economic Activities 2.0 (CNAE 2.0), which allows us to more accurately determine the contribution of the AV industry.

The IOM-based exercise we performed also allowed us to estimate some of the indirect effects of the AV industry, particularly its ability to indirectly boost production, jobs, value added, and revenues in other economic sectors. To calculate these indirect effects we use multipliers, which indicate how much each unit of a specific variable produced in the analyzed sector can generate of the same variable in other economic sectors[71]. A detailed description of the main results obtained in the input-output analysis is provided in Appendix I.

---

[69] The value added by a specific economic sector consists in the amount of output it actually produced, that is, after the amounts corresponding to the inputs employed in its production process are deducted. Put in a different way, the value added by a particular industry is that which this industry actually added to the domestic output as a whole.
[70] Whereas the 2009 IOM included 56 industries, the 2013 IOM features 68 industries.
[71] The employment multiplier, for instance, indicates how many jobs can be indirectly created in other economic sectors as a result of every job directly created in the industry at issue.

We calculate that, in 2013, the industry earned a gross R$ 44.8 billion in revenue at current value[72], and produced R$ 18.6 billion in value added at current value[73], or 0.38%[74] of Brazil's Gross Domestic Product that year[75]. Considering a multiplying factor of 1.90 for the value added of the industry, its indirect effect on the economy amounted to R$ 16.8 billion at current value[76].

Unfortunately, it is not possible to calculate the industry's direct contribution to Brazil's tax collection from official statistics. However, using the IOM, this figure is estimated at R$ 2.2 billion at present value[77]. Considering a multiplying factor of 1.66, the indirect contribution of the AV industry to the country's tax revenue was R$ 1.4 billion[78].

The table below gives an overview of the direct and indirect effects of the AV industry on employment, value added to the economy, and tax revenues.

Table 3. Direct And Indirect Effects Of The AV Industry

	Employment in 2014 (x1000)	Value Added (Billion BRL in 2013)	Tax Revenues (Billion BRL in 2013)
Direct	168.9	18.6	2.2
Multiplying Factor	*2.94*	*1.90*	*1.66*
Indirect	327.5	16.8	1.4
Total	**496.4**	**35.4**	**3.6**

Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

Other indicators can be obtained when we compare the value added to the AV industry with that added to other sectors of the economy. The following table shows one such comparison.

Table 4. Comparison With Other Industries (Billion BRL in 2013)

Industry	Value Added	Product	Tax Revenue
Textile	13.3	46.6	2.2
Audiovisual	18.6	44.8	2.2
Apparel	24.3	60.6	3.0
Automotive parts and accessories	24.8	89.1	4.3
Pharmochemicals And Pharmaceuticals	22.1	50.7	2.3

Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

As shown above, the AV industry proves relevant when we consider its contributions to value added and production value, which are comparable to those of other major

---

[72]Or R$ 55.4 billion at present value in July 2016 (adjusted by IBGE's Broad Consumer Price Index [IPCA]).
[73]Or R$ 23.0 billion at present value in July 2016 (adjusted by IBGE's IPCA)
[74] In 2013, the Brazilian GDP came to R$ 4.84 trillion at present value. Available at: <http://www.brasil.gov.br/economia-e-emprego/2014/02/em-2013-pib-cresce-2-3-e-totaliza-r-4-84-trilhoes>. Accessed on September 1, 2016.
[75] For comparison sake, the government budget for income distribution program "Bolsa Família" in 2013 was R$ 23 billion, as available at: <http://www.spm.gov.br/area-imprensa/ultimas_noticias/2012/11/30-11-orcamento-do-bolsa-familia-cresce-60-para-2013>. Therefore, the value added by the audiovisual industry is as large as the sum allotted to the program at issue.
[76]R$ 18.6 billion * (1.90 - 1) = R$ 16.8 billion.
[77]Or R$ 2.7 billion at present value in July 2016 (adjusted by IBGE's IPCA)
[78] R$ 2.2 billion * (1.66 - 1) = R$ 1.4 billion.

industries, such as textile, apparel, auto parts, and pharmaceuticals. The same can be said about tax revenue.

3.3 Audiovisual Content Exports

In regard to international transactions of audiovisual content, the United Nations Conference on Trade and Development (UNCTAD) separates goods and services in its definitions. Productions marketed in physical format, such as movies recorded on DVDs and Blu-ray discs, are classified as goods. Therefore, to export goods is to sell these items in the international market. Services, in turn, are divided into two categories. The first category encompasses any form of payment for a service rendered overseas by local residents (i.e. rentals, fees, etc.), while the second refers to distribution rights (royalties for the reproduction of audiovisual content). Overall, the import volume is much higher for AV services than for AV goods.

In Brazil, the trade balance for audiovisual services is negative, that is, the country imports more than it exports. According to data from UNCTAD, exports of AV services decreased 24.2% in the country between 2007 and 2012, while imports grew 111.5%, as shown in the chart below.

Chart 36. Trade Balance For Audiovisual Services—Brazil (Million BRL)

Source: UNCTAD. Prepared by Tendências.

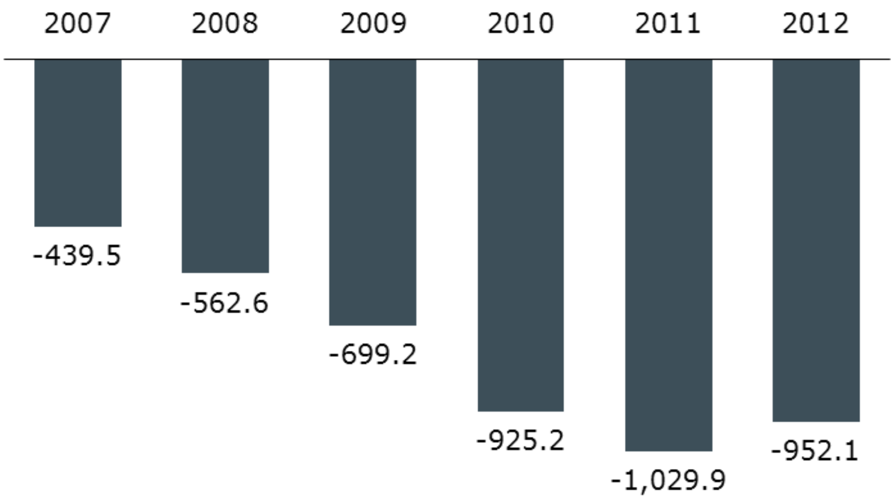
Two things must be understood about these results. Firstly, that Brazilian imports increased 92.6% in that same period, so much so that the ratio between AV imports and total imports (of goods and services) edged up from 0.25% to 0.32%[79]. Audiovisual exports, on the other hand, took a tumble compared with total exports—in 2007, the AV industry accounted for 0.011%[80] of Brazil's total exports, and that

[79] In 2007, the volume of audiovisual services imported in Brazil added up to US$387.3 million at present value, whereas the country's imports came to US$157,791 million. In 2012, the volume of these same services imported by Brazil added up to US$ 964.6 million at present value, while the country's total imports came to US$303,939 million. Source: UNCTAD.

[80] In 2007, the volume of audiovisual services exported by Brazil amounted to US$20.7 million, while the country's exports of goods and exports added up to US$184,603 million. Source: UNCTAD.

rate came to 0.004%[81] in 2012. Therefore, as the following chart demonstrates, the trade balance for AV services tends to decline—that is, the deficit tends to increase—as a result of this upturn in imports without a comparable advance in exports, even though the deficit inched down during the last year under analysis.

Chart 37. Brazilian Trade Balance For Audiovisual Services (Million BRL)



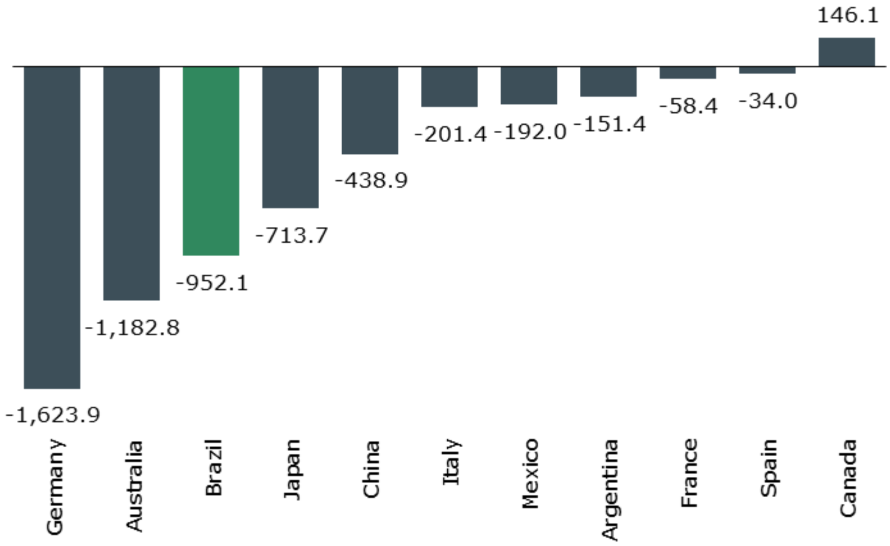
Source: UNCTAD. Prepared by Tendências.

The second point stems from a comparing Brazil with other countries. In so doing, we notice that the performance of the industry in Brazil is similar to those of several developed countries. Except for the U.S and the U.K., most developed economies have shown a trade deficit for AV services.

In 2012, Germany exported about US$880.4 million in audiovisual services, but imported US$ 2.5 billion, producing a deficit of US$1.6 billion—the largest among the surveyed countries. Australia comes second, with a deficit of about US$1.2 billion, US$191.4 million of which were exports of AV content and US$1.4 billion, imports. Brazil ranks third among the countries in deficit, with AV services imports totaling US$964.6 million and exports amounting to US$12.6 million in 2012, thus resulting in a negative balance of US$952.1 million. Next, we have countries such as China (US$438.9 million) and Mexico (US$192.0 million), as shown in the chart below.

[81] In 2012, the volume of audiovisual services exported by Brazil amounted to US$12.6 million at present value, while the country's exports added up to US$282,864 million. Source: UNCTAD.

Chart 38. Audiovisual Services Deficits—2012 (Million USD)



Source: United Nations Conference on Trade and Development (UNCTAD) Note: Due to data availability issues, the deficits listed for Canada, France, Italy, and Japan are for the year 2011. Prepared by Tendências.

3.4 Tax Burden

The audiovisual sector in Brazil is subject to a wide range of taxes at all stages of the value chain, which add up to a high tax burden on the end product. This problem is not specific to the AV industry, but rather a general characteristic of the Brazilian economy[82].

Below is a short list of all taxes charged during at least one stage of the industry's production chain:

- Service Tax (ISS), a municipal tax levied on a wide range of services, including film screenings
- Property Tax (IPTU), also a city tax levied on the commercial value of urban real estate;
- Goods and Services Tax (ICMS), charged in transactions involving interstate and intercity transportation of goods, besides services and communication;
- Income Taxes (IRPJ and IRPF), federal taxes levied on the net income of companies and individuals
- Manufacturing Tax (IPI), levied on products and production inputs sourced by the manufacturing industry
- Financial Operations Tax (IOF), charged on credit, foreign exchange, and insurance transactions, as well as bond and security trades

[82] For more information on Brazilian tax rates and the impact of the heavy tax burden on economic competitiveness, see: <http://www.oecd.org/ctp/tax-global/Brazil%20country%20note_EN_final.pdf> and <http://www.receita.fazenda.gov.br/principal/ingles/sistematributariobr/taxes.htm>.

- Other social-security-related taxes (PIS/PASEP/Cofins), paid by companies (based on their gross revenue) to finance unemployment insurance and other social security benefits, and
- Film Industry Development Tax (CONDECINE), levied on film screenings and rentals, as well as broadcast and pay TV operations. It is designed to finance the development of the country's film industry.

In order to authoritatively represent the tax burden shouldered by the audiovisual industry, in line with the breakdown of activities considered in the IOM, we chose to source from a data survey conducted by the Brazilian Revenue Department's Center for Tax and Customs Studies (CETAD)[83], since it provides historical series for gross income and revenue collection in the many different activities making up CNAE 2.0. Using these data, we can determine the tax burden borne by the activities where the AV industry collaborates most prominently.

These activities were pinpointed according to the number of employees in the sector, broken down into the CNAE 2.0 subcategories that constitute it (see Appendix II), in relation to the number of employees in the branches where these subcategories are found. Using this criterion, the following sectors where the audiovisual sector has a significant impact were identified.

- 59 - Filmmaking activities, video and TV show production, sound recording and music editing, and
- 60 - Radio and television activities[84].

The tax burden levied on the mentioned categories between 2008 and 2013 is detailed below:

Table 5. Tax Burden On CNAE Headings N. 59 And 60, 2008-2013 (% Of Gross Revenue)

CNAE	2008	2009	2010	2011	2012	2013	**Average**
59	10.41%	10.26%	10.32%	10.40%	9.81%	9.56%	**10.12%**
60	14.58%	12.86%	13.20%	15.08%	15.96%	15.26%	**14.49%**

Source: Brazilian Federal Revenue Department. Prepared by Tendências.

As shown in the table above, the tax burden faced by the activities described in the given period was 12.3% of their gross revenue, divided into 10.12% for the first activity group and 14.49% for the second.

---

[83] The Federal Revenue Department disclosed data on tax revenues by tax category (IRPJ, CSLL, PIS/Cofins, IPI, INSS, and other) in the period between 2008 and 2013 for different subsections of the National Classification of Economic Activities (CNAE), including those where the activities of the AV industry are listed. Data available at: <http://www.receita.fazenda.gov.br/publico/estudoTributarios/estatisticas/DadosSetoriais2008_2012.pdf> and <http://idg.receita.fazenda.gov.br/dados/receitadata/estudos-e-tributarios-e-aduaneiros/estudos-e-estatisticas/estudos-diversos/dados-setoriais-2009-2013.pdf>. Accessed on September 9, 2016.

[84] The share of the AV sector in the headings mentioned above was calculated based on the number of workers in the AV industry and the number of workers in the segment at issue. The activities where AV is represented most prominently are those described in 59—Filmmaking, video and TV show production, sound recording and music editing—and 60—Radio and television activities. See Appendix IV.

It should be pointed out that the figures above are an approximation of the tax burden on audiovisual activities in Brazil.

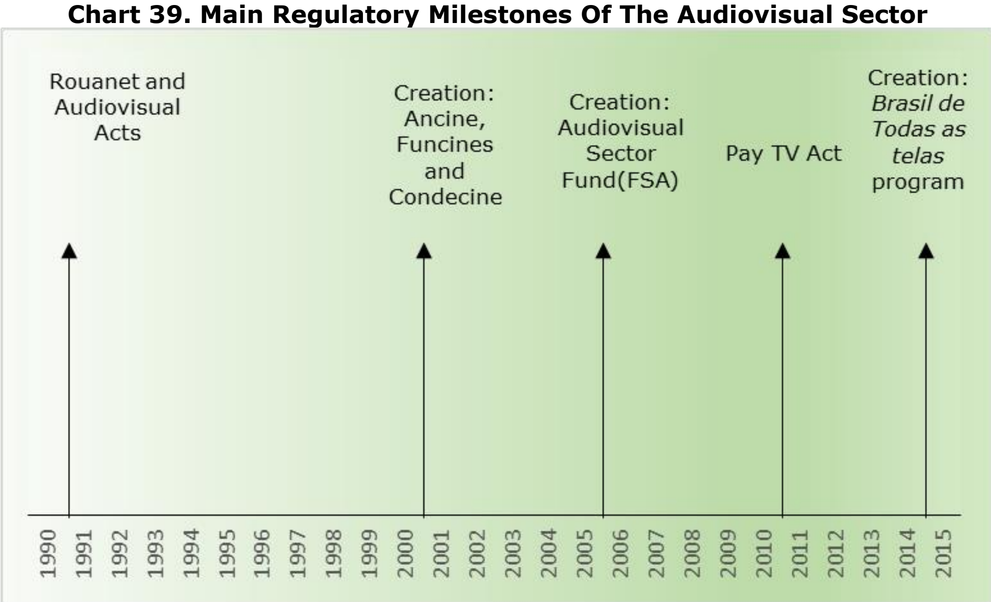
4 Legislation

This section will address the legal and regulatory aspects of the audiovisual industry. We will critically describe the most important mechanisms used to encourage the sector, as well as its development over time. Following that, we will deal with one of the main barriers to the progress of this industry in Brazil: piracy.

4.1 Brazil's Legal Framework For The Audiovisual Market

Brazil's public policies for the audiovisual industry gained more steam as of the mid-1990s, after a downturn that reached its nadir with the extinction of Embrafilme[85] in 1990. Based on incentive and control mechanisms for the audiovisual sector, five main regulatory milestones can be pinpointed, as outlined in the timeline below and briefly discussed in the subsequent topics.

Chart 39. Main Regulatory Milestones Of The Audiovisual Sector



Source: ANCINE. Prepared by Tendências.

The first years of the so-called "industry rebound" were marked by the institution of fiscal incentive mechanisms provided by the Rouanet Act[86] and the Audiovisual Act[87]. The Culture Incentive Act, most commonly known as Rouanet Act, allows for individuals and companies to invest a share of their income tax rates in cultural projects where there is no prospect of financial return. It has provided a substantial increase in available funds for the industry and has been regarded as essential for its upturn in the mid 1990s.

Another momentous event was the issuance of Executive Order 2228-1/01[88], which created the National Film Agency (ANCINE) and established the Contribution to the

[86] Act n. 8313, from December 23, 1991.
[87] Act n. 8685, from July 20, 1993.
[88] Executive Order 2228, from September 6, 2001. Executive Orders are issued by the President in relevant or urgent cases; they have the force of law and are effective immediately.

Development of the National Film Industry (CONDECINE)[89]. This can be considered the second regulatory milestone of the audiovisual sector in that period. The main purpose of ANCINE is to foster, regulate and monitor the Brazilian audiovisual industry. It is also responsible for managing the Financing Funds of the National Film Industry (FUNCINES), tax-relieved investment funds that were also created by Executive Order 2228/01 to support companies in the industry.

In December 2015, Act n. 13196 introduced a few changes to CONDECINE, including the prerogative given the Federal executive branch to automatically adjust the rate using the Broad Consumer Price Index (IPCA). The act also extended the validity of the fiscal benefits and incentives provided by FUNCINES into the calendar year 2017.

The third regulatory milestone of the industry was the creation of the Audiovisual Sector Fund (FSA)[90], a specific category within the National Culture Fund (FNC)[91] designed to facilitate investments in different activities of the industry, from production and marketing of theatrical and made-for-television films to construction of movie houses. FSA's innovation is in the fact that it is made up of funds that were generated by the industry itself and that proceed from duties market players had previously paid—the CONDECINE, in particular[92].

The approval of the so-called Pay TV Act[93], in turn, ushered in the fourth regulatory milestone of the industry. This law began to govern the sector with a view to creating demand for domestic productions. It thus established a minimum quota of three and a half hours of national content on prime time a week for all the so-called channels of qualified space[94], half of which quota must be produced by independent Brazilian production companies.

Furthermore, the so-called Pay TV Act also determined that, for every channel package offered by Pay TV service providers to consumers, one out of three qualified-space channels must be operated by a Brazilian scheduler.

Lastly, the fifth regulatory milestone was the preservation of government program Every-Screen Brazil ("*Brasil de Todas as Telas*"), whose conductive line is the domestic production of audiovisual content, to which end it promotes the development of local players. Funded by FSA, it encompasses everything from initial projects and scripts to the production and distribution of content, including professional training.

---

[89] CONDECINE falls under a tax category named Contribution on Economic Activities (CIDE) and, as such, must be used as an economic planning instrument whereby the government can regulate and intervene on economic sectors, correcting occasional market errors.
[90]Created by Act 11437, from December 28, 2006.
[91]New designation for the Cultural Promotion Fund, created by Act 7505, from July 2, 1986, designed to raise funds for cultural projects.
[92]Instituted by Executive Order 2228/01, this is a tax on economic activities designed to promote the development of the national film industry.
[93] Act 12485, from September 12, 2011.
These are channels that broadcast qualified-space audiovisual content for more than half of their prime time programming schedule. Any amount of programming dedicated to content other than news, sporting events, and studio shows may be considered qualified space.

4.2 Anti-Piracy Policies

Audiovisual piracy is defined as the appropriation, reproduction, and use of copyright-protected work without the copyright owner's due legal authorization. As described in the 2011 study by Ipsos and Oxford Economics[95], there are three main forms of film piracy: (i) physical, (ii) digital, and (iii) secondary. Physical piracy involves the sale and contraband of pirated or copied DVDs at the premises of a commercial establishment and by street peddlers. Digital piracy takes place when audiovisual works are illegally transferred and reproduced over digital networks (downloading on the internet, for example). Secondary piracy occurs when consumers of pirated products, by watching or lending their pirated copies, contribute to the increase of this illegal market[96]. While it describes only film piracy, the concept can be generally applied to other audiovisual products.

The negative consequences of piracy are manifold. Because this is an illegal market, it encourages informal labor, reduces the demand for original products, reduces government tax revenues, and strengthens organized crime—which is generally involved in piracy networks. Moreover, the earnings shared by producers, actors, and other industry workers are adversely affected, which reduces incentives for development in the industry, and even for other means of artistic and cultural expression.

The study conducted by Ipsos and Oxford Economics measured these impacts on the Brazilian economy, estimating that GDP losses have amounted to R$3.5 billion. The study surveyed individuals aged 18-64, living in urban areas, over a 12-month period ending in September 2010. It found that over half of the population (roughly 55%) contributed directly or indirectly to the pirate film market. Direct losses, or the amount spent on illegal purchases and marketing of audiovisual works, were estimated at R$4.02 billion, 44% of which was the result of physical piracy, 41.3% of secondary piracy, and 14.6% of digital piracy. In terms of revenue, earnings could have increased as much as R$7.26 billion.

Piracy also caused significant damage in the labor market, accounting for about 92,000 informal jobs. This is a result of the decline in demand for legally marketed original products, with repercussions for production and retail workers. In addition, the economy as a whole has faced a R$976-million decline in tax revenues, seeing as pirated copies generally do not pay taxes. This money could be ploughed back into public policies to promote the industry, or even to support social programs (promoting education or culture, for example).

Although several agencies currently enforce anti-piracy policies, including ANCINE's Center for Anti-Piracy Support (CACP) and the National Anti-Piracy Council (CNCP),

---

[95] Ipsos and Oxford Economics Report for the MPAA from January 2011: "The Economic Consequences of Movie Piracy".

[96] It is also worth mentioning a fourth type of piracy called "camcording", which consists in capturing audio and video inside a movie theater to later sell the recording. In Brazil, this kind of piracy has a particular trademark: the violator often records only the audio of foreign films dubbed in Portuguese, then syncs it with the video recorded abroad to sell on the black market.

their measures have been timid in recent years, and a number of challenges remain unresolved.

In the case of CNPC, which leads a series of repressive, educational, and economic initiatives in a number of segments, the current board of directors is taking on the task of turning the agency into a coordinator of more concrete anti-piracy measures. On the repressive front, it should focus its efforts in identifying the main criminal organizations behind the country's massive piracy figures, as well as in advocating for legislative measures that ensure actual punishment, not for users, but for these organizations, and facilitate takedowns of piracy websites. On the economic front, the debate over the appropriate content-marketing tax regime for the country stands out, especially its application in the digital market. On the educational front, it is important to promote campaigns with a message that exalts the domestic production and shows the value of these cultural assets to the country.

In recent years, just as the consumption of audiovisual content has strongly and increasingly migrated to digital media, piracy has also shifted from illegal sales of CDs and DVDs on the street (by peddlers and business facilities) to the distribution of pirated content over the Internet, especially via streaming.

Fighting online piracy involves additional challenges, since most piracy websites are hosted on servers located overseas. Given the technological nature of this type of activity, countering it also requires being constantly up to date on prevention, surveillance, and repression techniques. However, Brazilian anti-piracy legislation and public agencies have not kept abreast of these changes, which is necessary to effectively face up to digital piracy.

According to information from the MPA, based on data from December 01, 2015 to May 30, 2016, over 400 piracy websites dedicated to the Brazilian market are currently in operation, 57 of which receive over one million visitors per month. Combined, these pages offer over 13,000 national and foreign titles, including recent movies that are still in theaters, and have recorded 1.7 billion visits in the period. In addition to the harmful effects discussed before, this type of activity also hurts the development of the VoD market, since it represents an unfair competition for these services.

In Europe, where audiovisual piracy sites are tightly controlled, measures to block these webpages are common, prohibiting Internet providers from allowing users to access them. Overall, more than 800 pages have been blocked in European countries. A recent study by Donaher Et al. (2015)[97], featuring data on the British market, showed that taking down the region's 19 main piracy websites for audiovisual content between October and November of 2013 led to a significant drop in piracy. It also simultaneously increased access to legal streaming services such as Netflix by 12% on average and by as much as 23.6% among the so-called heavy users of pirated content. The study also concludes that measures to block unlawful websites must be relentless and encompass a significant number of pages in order to promote an actual shift from piracy hubs to legal online distribution channels. Moreover, the authors acknowledge that when legal digital services such as VoD platforms are available, anti-piracy policies can be more effective.

In Brazil, legislative support to anti-piracy efforts seems to be growing more robust in recent times. In 2015, the 200-member Mixed Parliamentary Coalition For Intellectual Property and Against Piracy was created with the sole purpose of advocating anti-piracy bills in Congress and oversee the compliance of other public agencies.

In addition to that, Congress is reviewing Bill 5.204/16, whose purpose is to overcome the legal and geographical challenges posed by the increased popularity of streaming services and the online distribution of illegal content. Its main innovation in the realm of digital piracy is that it includes a provision in the Internet Bill of Rights (Act 12965/14) for legally interrupting access to certain illicit services hosted outside of the country, giving the judiciary branch the power to order that these websites or applications be blocked.

The Bill underscores the applicability of its devices in cases of cybercrime—among which piracy stands out—in the following justification: "*a website that illegally makes copyrighted material available* (...) *which is hosted in a foreign server, will not abide by Brazilian judicial order* (...)*. In cases such as that mentioned before, one possible solution is to determine that Brazilian Internet Service Providers, which operate under Brazilian legislation, deny traffic to the destination that was considered illegal*"[98].

[98] Justification for Bill 5.204/16, available at: http://www.camara.gov.br/proposicoesWeb/prop_mostrarintegra;jsessionid=04986C9B457AD99C7A5C935F6B95E060.proposicoesWeb1?codteor=1455728&filename=PL+5204/2016, accessed on 09/19/2016.

5 Conclusion

This section will discuss the main challenges facing the audiovisual industry in Brazil, in light of the diagnoses provided so far. The goal is to offer a consistent and well-grounded contribution to the debate over which direction development policies should take in this business. We believe this is a promising sector, and a shift in paradigm provides a prospect of growing demand and increased opportunities. However, adjusting public policies could be decisive for the industry to overcome its challenges and achieve its full potential.

Over the course of this project, we identified gaps that policymakers have not properly addressed, such as the need to develop technological expertise in film production, and the very need to purchase equipment that incorporates modern features. Working in partnership with established, more experienced production companies in these new media is one path toward incorporating technology and updating the sector.

The low audiovisual export growth mirrors the scant internationalization of the industry, which could be remedied by further encouraging co-productions. This could facilitate the penetration of national products in the international market, both by bringing in the production expertise of major studios and by gaining access to their extensive international distribution networks.

Lastly, we believe the video-on-demand segment provides an important window of opportunity for Brazil's entire audiovisual value chain. In order for that to occur, the proper environment must be provided, especially in regulatory terms, so that this market can grow in the country. This segment's regulation, currently under review, must be adaptable and comprehensive enough to encompass different business models and technological innovations, otherwise it might stunt a still fledgling market.

5.1 Access To Film Theaters And Cinema Digitalization

With regard to the screening segment, Brazil's audiovisual industry is still at a very early stage compared with the more developed markets, as discussed in Section 3.2.

Despite Brazil’s advances in number of screens, grossing, and ticket sales, access to film theaters is still limited in the country, since the overwhelming majority of them are located in larger cities.

About 46% of the Brazilian population still lives in cities where there is no movie theater. Although there has been progress in recent years—in 2012, more than half of the population (51.6%) had no access to movie theaters in their area—that is still a high percentage.

In order to confront this situation, a government initiative to promote the decentralization of the screening segment and increase access to film theaters appeared in 2012 with the program *Cinema Perto de Você*[99] ("Cinema Near You"). The program, set up by ANCINE in collaboration with BNDES, is designed to help expand and update the country's film screening industry, focusing on cities and neighborhoods where movie theaters are few or nonexistent. This is an extensive program, and its recent creation is indicative of how the government's list of policies to advance the audiovisual sector has focused on the production segment.

On the other hand, Brazil has advanced substantially in terms of its capacity for digital content reproduction. The share of digital screens in the Brazilian industry went up from 31.1% in 2012 to 95.7% in the first half of 2016 (data from ANCINE). This leap was a result of the need to adapt screening houses to the recent technological shift at major American studios, which have been phasing out shipments of film prints since 2015 to make their distribution system digital-only.

5.2 Film Ticket Prices

Another factor preventing the access of Brazilians to film theaters is ticket prices. A 2013 study by UNESCO compares prices of film tickets in several countries, showing that tickets in Brazil are less affordable than in other countries when we consider the purchasing power of moviegoers.

According to the study, the average ticket price in Brazil accounted for 0.6% of consumers' average annual per-capita income in 2013 compared to less than 0.3% in the developed countries included in the sample.

Among the factors that explain this situation, policies that grant privileges (such as half-price tickets) to a select groups and the heavy tax burden on the industry stand out. With regard to the benefit policies, while designed to reduce prices for its beneficiaries, they ultimately increase the cost for other consumers. This is a consequence of opportunistic behavior, since eligibility checks are often flawed.

As for Brazil’s tax burden, according to a study conducted by the Brazilian Planning and Taxes Institute (IBPT), the cost added to movie and drama theater tickets accounted for 30.25% of their prices in 2015[100].

One specificity of the Brazilian market is the so-called CONDECINE Title. This is a fixed tax rate levied on audiovisual works released in the Brazilian market for commercial purposes, such as theater screening, home reproduction, and rental (DVDs and Blu-ray discs), as well as airing on broadcast or pay television. By helping to raise taxes on the industry, this rate ultimately makes these goods more expensive in Brazil, which, in turn, encourages their illegal trade.

5.3 The Piracy Issue

Copyright infringement, or piracy, is one of the practices that undermine a market’s efficient operation the most. By warping agents' incentives, it produces perverse

---

[99] Introduced by Act 12599, from March 23, 2012.
[100] Available at <http://www.ibpt.com.br/noticia/2216/Carga-tributaria-de-presentes-para-o-dia-dos-pais-se-aproxima-dos-80>. Accessed on September 12, 2016.

effects on welfare. Unfortunately, this is a common phenomenon in Brazil, affecting virtually every industry. On the one hand, piracy reduces financial returns for innovative players, which discourages their activity. To make a film production feasible, for example, it is necessary to estimate an average price that will be charged from a certain number of viewers. Piracy brings down this base for calculation, requiring an increase in prices for consumers who continue to acquire the product legally. On the other hand, piracy makes tax evasion easier, hurting government coffers—and ultimately citizens, who use public services funded by these taxes. Lastly, this is an activity often run by organized crime groups, which are strengthened by its growth. Therefore, the development of Brazil's audiovisual sector requires effective anti-piracy and copyright protection policies.

In recent years, just as the consumption of audiovisual content has strongly and increasingly migrated to digital media, piracy has also shifted from illegal sales of CDs and DVDs on the street (by peddlers and business facilities) to the distribution of pirated content over the Internet, especially via streaming.

According to information from the MPA, based on data from December 01, 2015 to May 30, 2016, over 400 piracy websites dedicated to the Brazilian market are currently in operation, 57 of which receive over one million visitors per month. Combined, these pages offer over 13,000 national and foreign titles, including movies that are still in theaters, and have recorded 1.7 billion visits in the period. In addition to the harmful effects discussed before, this type of activity also hurts the development of the VoD market, since it represents unfair competition for these services.

Of all the concrete measures that would tremendously contribute to reducing piracy-related distortions, expediting the removal of pirated content from the market, approving a statutory law that requires Internet Service Providers to block traffic to some illicit services hosted outside the country—as proposed by Bill 5204/16—stands out. This type of ban is common in European countries, and its purpose is to overcome the challenges posed by the fact that most piracy websites are hosted on foreign servers.

Other measures that are also important in the fight against piracy are: (i) to criminalize "camcording", which is a widespread practice in Brazil; (ii) to address piracy in peer-to-peer networks; and (iii) to accelerate the process of destroying pirated material.

5.4 Exporting Brazilian Productions

Section 3.3 of this report showed that the audiovisual industry in Brazil currently runs a trade deficit. In other words, the country imports more audiovisual services than it exports, even though the sums involved in these transactions are virtually negligible next to the country's foreign trade figures.

Two important points must be stressed about this observation. Firstly, developed nations, such as Germany and Australia, have also recorded trade deficits in this sector. This is to say that the trade deficit in Brazil's audiovisual industry is not an anomaly in itself.

The second point concerns the industry's import and export performance. The ratio between Brazil's imports of audiovisual services and its total imports of goods and services inched up from 0.25% in 2007 to 0.32% in 2012. The opposite result is obtained when we analyze exports of audiovisual services: their share in Brazil's total exports saw a downtick, from 0.011% in 2007 to 0.004%, in 2012. This goes to show that the AV industry trade deficit tends to grow as a result of this increase in imports without a comparable advance in exports.

This scenario implies that the industry is now less competitive internationally, which is why the market penetration of Brazilian productions overseas hasn't grown much. Changing this situation would require, among other steps, that public policies for the industry were steered in a different direction. Among other measures to give the domestic production a competitive edge in the global market, greater integration within value chains in the audiovisual industry, which operate on a global scale, must be promoted. The increase in co-productions with major market players is one way to achieve that, since, in addition to potentially improving the quality of Brazilian productions, they enable the sharing of expertise and facilitate access to the global market. Therefore, changing the regulations to smooth the way for these cooperative, mutually beneficial arrangements is a vital step toward strengthening the domestic industry in a more sustainable manner.

5.5 Human Resource Training And Entrepreneurship

Because of its a dynamic and creative nature, the audiovisual industry requires professionals with a befitting profile. One of the goals of public policy is to train such professionals. It is important to find cooperation in players that are already operating in the audiovisual sector and already have the most up-to-date technical expertise. One way of promote this sharing of knowledge is to set up partnerships with studios and production companies, which could commit to training the interested parties in collaboration with structured training institutions, such as colleges and universities.

On a different note, as we pointed out in Section 2, the audiovisual industry is known for outsourcing its jobs, usually to small- and medium-sized businesses that specialize in specific tasks along the value chain. This is the ideal environment for entrepreneurship, which blossoms with startups that provide these services. Many companies that are now well established and spearheading their segments began life as small service providers for big studios. The advance of these businesses was essential for the development of modern techniques—special effects in particular.

Targeted public policies can further stimulate this entrepreneur-friendly environment. One way of doing so is to extend lines of credit at more favorable terms for the smaller businesses in the industry. Many activities in the sector require equipment and software that can add up to substantial costs. Another option could be to adopt an upgraded tax regime (in addition to existing attempts, such as the "Super

Simples"). In order to prevent market distortions and improprieties, it is important to set clear and unambiguous rules of eligibility to these benefits.

5.6 Sustainability

With regard to the full development of audiovisual production—particularly film production—, many challenges are still facing the industry in Brazil.

As laid out in Section 4.1, the national film market has grown considerably since 1995, driven by laws promoting the arts, the introduction of incentive mechanisms, and the country's economic development. The creation of the Audiovisual Industry Fund (FSA) in 2006 (see Section 4.1) was an important milestone for the industry, seeing as the number of national film releases went from 84 in 2009 to over 100 from 2010 onward, amounting to 129 titles in 2015[101].

Although the number of Brazilian movies increased considerably in the period, the share of ticket sales for domestic titles did not follow the same pace, indicating that, while the government provided strong incentives to boost the supply of these films, the demand did not keep up. The share of national films in total movie releases went from 26.5% in 2009, to 28.9% in 2015. However, the share of domestic films in box-office revenues remained relatively unchanged during the period at issue, averaging about 13% and recording the highest rate in 2010, when Brazil's greatest box-office success, *Elite Squad: The Enemy Within*, was released[102].

The public's response to the incentives provided by the government to boost the supply of national films is also observed when we compare the development of real earnings from national and foreign productions. While national productions sustained comparably regular gains over the decade at issue, foreign productions saw their revenues spiral.

One downside to the policies adopted to promote the national production, which also demonstrates how poorly the demand has responded to government efforts to increase the supply, is that the audiovisual industry now runs a deficit and, consequently, relies heavily on public subsidies. Using data from ANCINE[103] on the amount of funds raised by each project, we found that, of 1,009 national films[104], 631 (62.5%) made a loss[105], 139 (13.8%) made a profit, 232 (23%) received no incentive, and the remainder (7 films or 0.7% of the total) could not provide the information.

By breaking down these figures back to the main regulatory milestones in the audiovisual production segment[106], we notice that, although the new incentive

---

[101] Available at <http://oca.ancine.gov.br/producao_.htm>. Accessed on September 12, 2016.
[102] According to ANCINE's records, *Elite Squad: The Enemy Within* is the national movie seen by most people: 11,146,723 overall. Available at <http://oca.ANCINE.gov.br/filmes_bilheterias.htm>. Accessed on September 12, 2016.
[103] Available at:<http://oca.ANCINE.gov.br/producao_.htm>. Accessed on September 12, 2016.
[104] Brazil recorded 1,009 domestic productions between 1995 and 2013.
[105] Loss and profit are determined by the difference between box office revenues and funds raised via incentive policies.
[106] The creation of ANCINE in 2001 and of the Audiovisual Sector Fund (FSA) in 2006.

mechanisms[107] are much more committed to the industry's financial balance, the share of Brazilian films making a loss is still very high (about 61% of domestic productions). This shows that the policy of fostering the national production has promoted the supply, but the demand has not kept the same pace, which led the industry to run continuous losses and become highly dependent on funds from incentive programs.

Within this context, in order for the industry is to advance sustainably henceforth, it is necessary that the current development policy be reviewed. As stated in our analysis of the Brazilian experience, most domestic box-office successes that were also well received internationally were, on some level, collaborations with foreign production and/or distribution companies. Therefore, reproducing and building upon these success stories that involved co-productions should promote continuous development in the industry, bringing substantial benefits to Brazilian society.

5.7 Opportunities And Challenges In The VoD Segment

The recent advance of video-on-demand (VoD) services has had profoundly impacts on the audiovisual chain. On the supply side, this new and revolutionary way of distributing audiovisual content has led to important changes in the market. More recently, it also began to impact content production, as major platforms began to tap into the segment. On the demand side, VoD has produced changes in viewing habits and preferences, as consumers increasingly opt for non-linear TV programming services, which give then great freedom to choose what to watch, when and where.

We understand that the VoD segment is likely to continue to grow over the course of the next few years, in line with the progress in broadband Internet connections and digital technologies and reflecting the changes in viewers' consumption patterns. Accordingly, VoD services are emerging as the most promising driver of growth in the AV sector, providing opportunities for programmers and producers of every stature. However, in order for this promise to be fulfilled, the necessary conditions for development in the industry must be ensured.

In Brazil, VoD services regulations are under review, and they may include requiring that digital catalogs maintain a national content quota, that providers give this content visual prominence within their platform, and that the CONDECINE be collected. However, it is important that, before being enforced, these requirements be carefully assessed for their risks and potential impacts on the behavior of users and content providers.

Lawmakers are still deliberating on how VoD services will be taxed. If the adopted tax rules significantly burden providers, this may drive the prices of these services up, making them less appealing to Brazilian consumers. Along these lines, a potential obstacle to the development of this industry in Brazil may come from actually charging the CONDECINE rate on VoD services. While the law already provides for this to occur, in practice, CONDECINE is not collected in the segment. If it were

[107] See Section 4.1.

otherwise, consumers would be hurt by the ensuing reduction in available movie titles and greater incentives to piracy, seeing as this would hinder legal access to these services. In addition, this would also take a toll on the market as a whole, seeing that it would discourage the local production, as well investments in new content and technology. This is consequently a threat to the development of this dynamic and promising segment in Brazil, and could ultimately hurt the entire industry.

Therefore, the new regulatory framework must be able to discipline the market, while also encouraging investments in and the development of VoD services. To that end, it must ensure that users, providers, and investors have legal certainty and the adaptability required to deal with different business models, thus preventing this innovative and dynamic market from being stunted.

PROJECT TEAM

This report was prepared by:

Ernesto Moreira Guedes Filho: a Bachelor of Economic Science at the University of São Paulo School of Economics and Business Administration (FEA-USP) and post-graduated at Foundation Institute of Economic Research (Fipe-USP). He is currently Executive Director and head of Studies, Projects and Expert Opinions at Tendências.

Eric Universo Rodrigues Brasil: a Doctor and Master of Economic Theory at the University of São Paulo (USP), and a Bachelor of Economic Science at the Foundation School of Commerce Álvares Penteado (FECAP). He is a Microeconomics and Quantitative Methods Professor, as well as coordinator of the FECAP Research Center.

Carla Rossi: a Master of Public Policy Management at Getúlio Vargas Foundation São Paulo (FGV-SP) and a Bachelor of Economic Science at the University of São Paulo School of Economics and Business Administration (FEA-USP).

André Ricardo Noborikawa Paiva: a Master of Applied Economics at the University of São Paulo College of Agriculture Luiz de Queiroz (ESALQ/USP) and a Bachelor of Economic Science at the Foundation School of Commerce Álvares Penteado (FECAP). He is experienced in technically assisting expert analyses, particularly in projects involving the economic and financial rebalance of government concession contracts.

Daniele Chiavenato: a Bachelor of Economic Science at the University of São Paulo School of Economics, Business, and Accounting Science (FEA/USP).

Appendix I—Input-Output Model For The Audiovisual Industry

This appendix complements Section 3 and allows us to more accurately quantify the importance of the audiovisual industry for the economy as a whole. In order to do so, we've employed input-output techniques, which are an established instrument for this type of analysis. These exercises allow us to determine to what measure changes in the audiovisual industry (such as an increase in demand produced by incentive policies) will affect the rest of the economy. The estimated technical coefficients are, therefore, a valuable policy-shaping tool for the industry.

Short Description

The Input-Output Model (IOM) consolidates a host of information about the country's production structure and allows us to analyze production flows in the manufacturing of intermediary and finished goods. To increase production in an industry it is necessary to use inputs produced by other industries. Consequently, a bump in demand for any given product will lead to an increase in its production, thus boosting the demand for products from these other industries. The methodology behind IOM takes into account the connections between all economic sectors, thereby making it possible to simulate both the immediate effects of a measure on its target industry and its indirect consequences to other industries. This set of information makes IOM a valuable instrument of economic analysis and public policy development.

The IOM was set up using Brazil's National Accounts figures, as calculated and categorized by the Brazilian Institute of Geography and Statistics (IBGE). The model used in this study originally comprised 68 sectors and relates to production flows observed in 2013, the last year for which final data was available. The audiovisual industry sprawls into the following segments: (a) printing and recording reproductions; (b) retail and wholesale trade, excluding automotive vehicles; (c) television, radio, film, and sound and image recording or editing activities; (d) telecommunications; and (d) non-residential rent and intellectual property management. The information on these segments was extracted using data from Brazil's Government Accounts and the RAIS-MTE. Considering this breakdown, the IOM analyzed in this study thus included 69 sectors, 33 of which are linked with services activities, as described in the table below.

Table 6. IOM Services Sectors

IOM Services Sectors
Housing
Meals
Land Transport
Water Transport
Air Transport
Storage, Ancillary Transport Activities, and Mail
Public Education
Construction
Real Estate Activities

IOM Services Sectors
Legal, Accounting, Consulting, and Headquartering Activities
Architecture, Engineering, Technical Tests/Analyses, and R&D
Other Professional, Scientific, and Technical Activities
Non-Real-Property Rentals and Asset or Intellectual Property Management
Other Management Activities and Additional Services
Surveillance, Security, and Investigation Activities
Artistic, Creative, and Entertainment Activities
Associative Organizations and Other Personal Services
Domestic Services
Audiovisual
Financial Mediation, Insurance, and Additional Social Security
Public Administration, Defense, and Social Security
Electric Power, Natural Gas, and Other Utilities
Water, Sewage, and Waste Management
Automobile and Motorcycle Trade and Repair
Retail and Wholesale Trade, excluding automobiles
Private Healthcare
Television, Radio, Film, and Sound & Image Recording/Editing Activities
Telecommunications
System Development and Other Information Services
Private Education
Machinery & Equipment Maintenance, Repair, and Installation
Public Healthcare
Domestic Services

Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

Results

The first relevant piece of information about the AV sector we can extract from the model has to do with the production multiplier. From the flow of inputs and outputs to and from the sector we can infer the direct and indirect production each monetary unit spent on final audiovisual products generates in the audiovisual production chain. According to the 2013 IOM, the audiovisual production multiplier is 1.79. Put another way, in addition to the direct production, every R$ 100 spent on final audiovisual products generates another R$ 79 in indirect production. For the sake of comparison, the average production multiplier for the other service sectors is 1.56.

We can also use IOM to obtain multipliers for employment, value added[108], imports, and taxes. All of them show the multiplying effect any change to these variables has on other sectors. The employment multiplier, for instance, provides the number of jobs created, directly or indirectly, as a result of every job directly created by a public

[108] Value added, unlike gross earnings, refers to how much the industry actually contributed to creating value. Calculating it involves subtracting the amount spent on inputs produced by other industries from the gross earnings. In other words, we deduct from the industry's earnings whatever was added by other industries to find how much value and revenue was added to the economy.

policy or another change in the industry. The table below lists the figures found for the audiovisual industry next to those found for the other services sectors.

Table 7. Multipliers Of The Audiovisual Sector

	Multiplier			
	Employment	Value Added	Imports	Taxes
Audiovisual	**2.94**	**1.90**	**1.79**	**1.66**
Position Among Services Sectors	4th	6th	21st	18th
Average For Services Sector	1.96	1.56	1.90	1.61
Standard Deviation	1.37	0.39	0.68	0.46

Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

Take the employment multiplier, for example, which is 2.94. This number means that, for every job created in the AV segment, 1.94 jobs are open in other sectors of the economy as a result of its induced demand. The other services segments average 1.96, and the audiovisual industry ranks 4th among the segments (33 overall) with the highest multipliers in the input-output analysis.

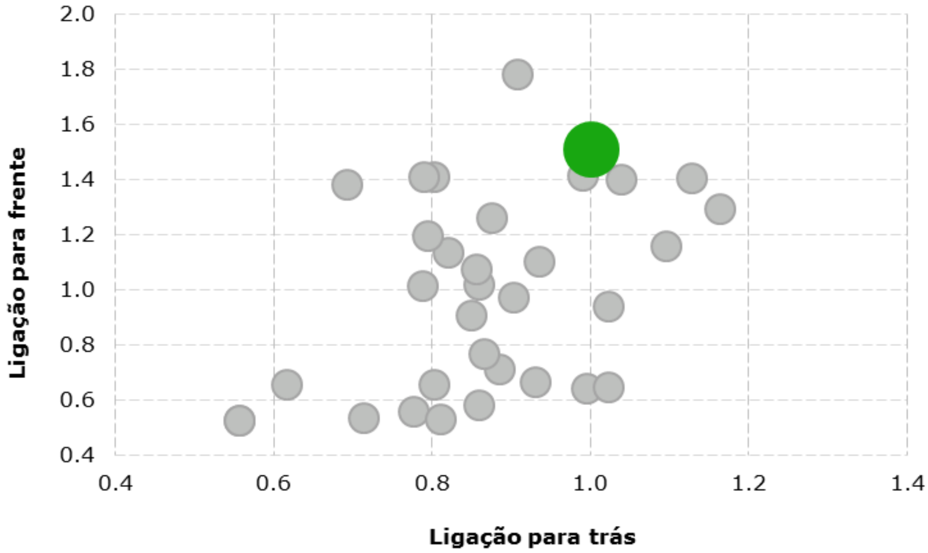
Another example is the import multiplier, of 1.79. This result conveys that, for every R$1.00 produced in the sector, R$0.79 are generated in imports. This is to say that production in the audiovisual sector requires very few imported inputs, focusing instead on domestic inputs.

With regard to how close the connection between the audiovisual sector and the other economic sectors is in Brazil, this IOM allows us to calculate the so-called connection ratios, which show which industries have the greatest concatenation power within the country's production structure. In other words, we can pinpoint those with the highest demand for audiovisual products, as well as the industry's greatest input suppliers. The Rasmussen-Hirschmann methodology[109] provides a backward connection ratio of 0.88 and a forward connection ratio of 1.30 for the audiovisual sector. These coefficients indicate that the AV sector is in demand by other sectors, but demands relatively little from them, which is typical of services, which often rely on intensive labor.

The chart below compares these results (green circle) with those found for the other services sectors, confirming that the AV industry is the second largest input supplier (forward connection) among service providing sectors in the Brazilian economy. In other words, audiovisual services are among the most ubiquitous services in Brazil's production chain for final goods and services.

[109] MILLER, R.E., BLAIR, P.D. Input-Output Analysis: Foundations and Extensions. Englewood Cliffs: Prentice-Hall, 2009.

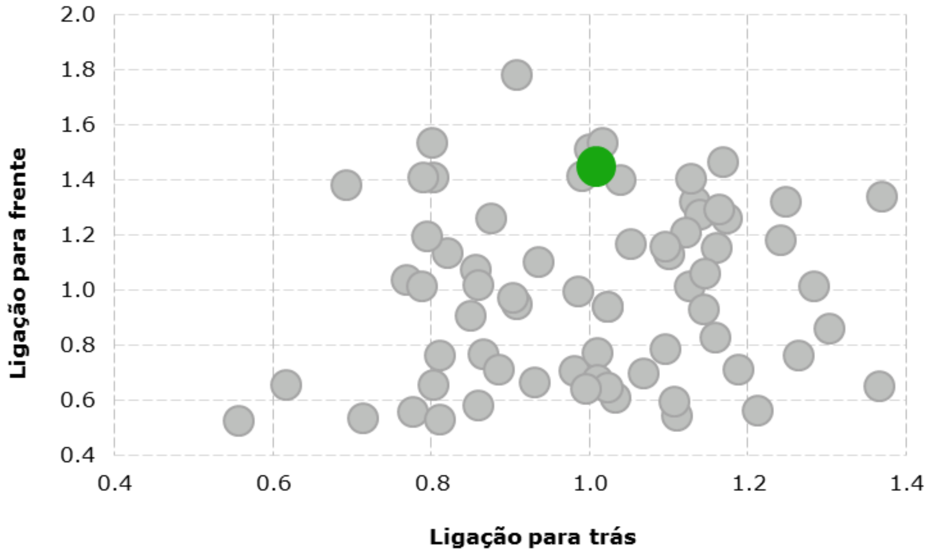
Chart 40. Rasmussen-Hirschmann Connection Ratios For Services Sectors



Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

The following chart shows the same comparison, but this time considering all economic sectors. Even when compared with the rest of the economy, the audiovisual sector still has a high forward connection ratio, which attests to its importance as a cushion for final demand shocks that affect the rest of the production structure. Its backward connection ratio, in turn, as expected, is slightly higher than average. Because this industry relies on intensive labor, its demand for inputs provided by other sectors is limited, which denotes a low backward connection coefficient.

Chart 41. Rasmussen-Hirschmann Connection Ratios For The Economy



Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

Based on its forward and backward connections, we can analyze the sphere of influence of the audiovisual industry; that is, the sectors that most require audiovisual services and those that most provide inputs for audiovisual production.

Table 8. Industries Most Affected By Audiovisual

Industries That Most Demand Audiovisual	Industries Most In Demand By Audiovisual
Other Professional, Scientific, and Technical Activities	Telecommunications
Television, Radio, Film, and Sound & Image Recording/Editing Activities	Other Management Activities and Additional Services
Telecommunications	Legal, Accounting, Consulting, and Headquartering Activities
Artistic, Creative, and Entertainment Activities	Other Professional, Scientific, and Technical Activities

Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências. Note: The AV sector itself was not included among its main customer and supplier industries.

The table above shows that the AV industry feeds into major economic sectors in the country, most notably the telecommunications sector. It is also in demand in major economic sectors, among which are those comprising technical and scientific activities, as well as television, radio, and film activities, and sound and image recording or editing.

Other Gauges of Industry Relevance

This IOM-based exercise allows us to indirectly gauge the relevance of the AV industry for the Brazilian economy in other ways. We calculate that, in 2013, the industry earned a gross R$44.8 billion in revenue at present value[110], and added a value of current R$18.6 billion[111], or 0.38% of Brazil's Gross Domestic Product, to the economy that year[112]. Unfortunately, we cannot directly calculate how much the industry has contributed to Brazil's tax collection using official statistics. However, using the IOM, this figure is estimated at R$2.2 billion at present value[113].

Other indicators can be obtained when we compare the value added to the AV industry with that added to other sectors of the economy. The following table shows one such comparison.

Table 9. Comparison With Other Industries (Billion BRL in 2013)

Industry	Value Added	Product	Tax Revenue
Textile	13.3	46.6	2.2
Audiovisual	18.6	44.8	2.2
Apparel and accessories	24.3	60.6	3.0
Automotive parts and accessories	24.8	89.1	4.3
Pharmochemicals And Pharmaceuticals	22.1	50.7	2.3

Source: Brazilian Government Finances - Brazilian Institute of Geography and Statistics (IBGE) (2013). Prepared by Tendências.

Note that the AV industry proves relevant when we consider its contributions to value added, production value, and tax revenue, which are comparable to those of other major industries, such as textile, apparel, auto parts, and pharmaceuticals.

[110]Or R$ 55.4 billion at present value in July 2016 (adjusted by IBGE's Broad Consumer Price Index [IPCA]).
[111]Or R$ 23.0 billion at present value in July 2016 (adjusted by IBGE's IPCA)
[112] In 2013, the Brazilian GDP came to R$ 4.84 trillion at present value. Available at: <http://www.brasil.gov.br/economia-e-emprego/2014/02/em-2013-pib-cresce-2-3-e-totaliza-r-4-84-trilhoes>. Accessed on September 1, 2016.
[113]Or R$ 2.7 billion at present value in July 2016 (adjusted by IBGE's IPCA)

Appendix II—Definition Of The Audiovisual Sector

The information presented in Section 3 was extracted from the microdata in the Annual List of Social Information (RAIS), an annual socioeconomic report released by the Ministry of Labor and Employment (MTE)[114].

To obtain figures for employment, payroll, education, and number of business facilities, we defined the analyzed segments according to the National Classification of Economic Activities (CNAE) 2.0, which is the standard adopted by MTE. The categories making up each segment are listed below.

Table 10. Definition of The Audiovisual Sector According to CNAE

CNAE	Description	Segment
1830-0/02	Film, video, and TV show distribution	Distribution
4649-4/07	Programmers	Distribution
4762-8/00	Theater screening activities	Screening
5911-1/01	Film studios	Production
5911-1/02	Advertising film production	Production
5911-1/99	Previously unspecified production activities	Production
5912-0/01	Dubbing services	Production
5912-0/02	Sound mixing in audiovisual production	Production
5912-0/99	Previously unspecified post-production activities	Production
5913-8/00	Video playback on any device	Reproduction
5914-6/00	Broadcast television activities	Broadcast TV
6021-7/00	Pay television activities, excluding programming	Pay TV
6022-5/01	Cable television operators	Pay TV
6022-5/02	Microwave TV operators	Pay TV
6141-8/00	Satellite TV operators	Pay TV
6142-6/00	Wholesale trade of film, CDs, DVDs, and magnetic tapes	Retail
6143-4/00	Retail trade of vinyl discs, CDs, DVDs, and magnetic tapes	Retail
7722-5/00	Rentals of video tapes, DVDs, and similar media	Retail

Source: Brazilian Institute of Geography and Statistics (IBGE). Prepared by Tendências.

Table 11. Definition of the other mentioned segments

CNAE	Description	Industry
58	Editing for books, newspapers, magazines, and other publications	Printing
79	Travel agencies, tour operators, and reservation services	Tourism
551	Short-term housing activities at hotels, motels, and inns	Hotel
931	Sports activities	Sports

Source: Brazilian Institute of Geography and Statistics (IBGE). Prepared by Tendências.

[114] Available at: <http://acesso.mte.gov.br/rais/estatisticas.htm>. Accessed on September 2, 2016.

Appendix III—Employment, Salaries, And Payroll In The Audiovisual Industry

Table 12. Number of employees

Industry	2007	2008	2009	2010	2011	2012	2013	2014
Audiovisual	132,479	137,193	152,022	158,465	165,467	169,895	175,053	168,880
	(0.34%)	(0.32%)	(0.34%)	(0.33%)	(0.32%)	(0.32%)	(0.31%)	(0.30%)
Printing	151,119	162,818	157,601	160,121	163,060	160,231	151,227	144,991
	(0.39%)	(0.38%)	(0.36%)	(0.33%)	(0.32%)	(0.30%)	(0.27%)	(0.26%)
Tourism	75,294	83,004	86,787	97,062	108,080	118,132	118,592	116,876
	(0.19%)	(0.20%)	(0.20%)	(0.20%)	(0.21%)	(0.22%)	(0.21%)	(0.21%)
Hotel	363,021	392,667	406,855	437,903	468,102	490,553	511,442	536,950
	(0.94%)	(0.92%)	(0.92%)	(0.90%)	(0.90%)	(0.91%)	(0.92%)	(0.95%)
Sports	153,756	163,452	174,318	191,181	208,371	228,106	245,437	265,887
	(0.40%)	(0.38%)	(0.39%)	(0.39%)	(0.40%)	(0.42%)	(0.44%)	(0.47%)

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Numbers in brackets represent the share in the services sector.

Table 13. Payroll (Million BRL in July 2016)

Industry	2007	2008	2009	2010	2011	2012	2013	2014
Audiovisual	4,594,632	5,380,918	6,165,709	6,365,282	6,807,134	7,105,242	7,596,565	7,259,475
	(0.83%)	(0.82%)	(0.83%)	(0.73%)	(0.68%)	(0.62%)	(0.59%)	(0.51%)
Printing	4,331,794	5,689,735	5,630,725	5,740,372	5,961,834	6,236,283	5,843,558	5,613,625
	(0.78%)	(0.87%)	(0.76%)	(0.66%)	(0.60%)	(0.55%)	(0.45%)	(0.40%)
Tourism	1,172,743	1,817,548	2,007,498	2,266,472	2,596,095	3,123,802	3,310,662	3,460,594
	(0.21%)	(0.28%)	(0.27%)	(0.26%)	(0.26%)	(0.27%)	(0.26%)	(0.24%)
Hotel	3,767,888	5,813,958	6,255,049	6,852,881	7,486,532	8,257,965	9,012,514	9,649,309
	(0.68%)	(0.89%)	(0.84%)	(0.79%)	(0.75%)	(0.72%)	(0.70%)	(0.68%)
Sports	3,767,888	3,376,727	3,721,588	4,089,435	4,589,845	5,113,036	5,523,296	5,927,095
	(0.68%)	(0.51%)	(0.50%)	(0.47%)	(0.46%)	(0.45%)	(0.43%)	(0.42%)

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures in brackets represent the share of jobs in the services sector. Adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 14. Average Salary (BRL in July 2016)

Industry	2007	2008	2009	2010	2011	2012	2013	2014
Service	R$ 1,198	R$ 1,287	R$ 1,401	R$ 1,493	R$ 1,611	R$ 1,762	R$ 1,927	R$ 2,084
Audiovisual	R$ 2,890	R$ 3,268	R$ 3,380	R$ 3,347	R$ 3,428	R$ 3,485	R$ 3,616	R$ 3,582
Printing	R$ 2,389	R$ 2,912	R$ 2,977	R$ 2,988	R$ 3,047	R$ 3,243	R$ 3,220	R$ 3,226
Tourism	R$ 1,298	R$ 1,825	R$ 1,928	R$ 1,946	R$ 2,002	R$ 2,204	R$ 2,326	R$ 2,467
Hotel	R$ 865	R$ 1,234	R$ 1,281	R$ 1,304	R$ 1,333	R$ 1,403	R$ 1,468	R$ 1,498
Sports	R$ 2,042	R$ 1,722	R$ 1,779	R$ 1,783	R$ 1,836	R$ 1,868	R$ 1,875	R$ 1,858

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 15. Workers With An Undergraduate Degree (%)

Industry	2007	2008	2009	2010	2011	2012	2013	2014
Service	16.2%	16.1%	16.6%	17.8%	18.1%	18.6%	19.4%	20.2%
Audiovisual	19.9%	21.2%	22.4%	23.1%	21.9%	22.8%	23.7%	25.4%
Printing	21.1%	21.8%	21.9%	24.0%	25.0%	26.6%	27.6%	29.0%
Tourism	18.4%	19.3%	20.2%	21.2%	21.7%	23.1%	24.7%	26.3%
Hotel	4.0%	4.1%	4.2%	4.3%	4.4%	4.7%	5.6%	5.8%
Sports	17.9%	19.0%	20.6%	22.7%	26.1%	27.8%	30.0%	32.0%

Source: RAIS/MTE (Microdata). Prepared by Tendências.

Table 16. Audiovisual production segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	178,753	325,757	408,960	430,363	510,304	564,312	605,797	618,794
Employment	7,641	9,815	11,774	13,133	15,337	16,839	17,948	18,114
Employment in December	5,613	6,582	7,975	8,660	10,169	11,207	11,688	11,545
Business facilities	949	1,109	1,274	1,529	1,736	1,928	2,047	2,149
Average Salary (BRL in July 2016)	1,949	2,766	2,895	2,731	2,773	2,793	2,813	2,847
Workers w/ Undergrad. Degree (%)	21%	22%	22%	23%	23%	26%	27%	30%

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 17. Audiovisual distribution segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	242,498	292,227	314,286	459,980	359,356	403,431	384,932	381,876
Employment	7,263	6,406	6,094	8,784	6,939	6,393	5,575	5,017
Employment in December	4,625	4,418	4,136	4,762	4,920	4,416	3,739	3,812
Business facilities	549	457	376	323	289	253	227	224
Average Salary (BRL in July 2016)	2,782	3,801	4,298	4,364	4,316	5,259	5,754	6,343
Workers w/ Undergrad. Degree (%)	20%	24%	26%	29%	26%	33%	37%	43%

Source: Annual List of Social Information (RAIS-MTE) (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 18. Audiovisual reproduction segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	33,174	40,404	47,678	28,292	25,014	40,130	34,665	36,297
Employment	1,049	1,088	1,104	781	718	1,349	1,156	1,104
Employment in December	694	671	574	543	490	722	787	433
Business facilities	58	57	51	56	56	60	50	51
Average Salary (BRL in July 2016)	2,635	3,095	3,599	3,019	2,903	2,479	2,499	2,740
Workers w/ Undergrad. Degree (%)	23%	23%	24%	25%	22%	14%	17%	19%

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 19. Audiovisual screening segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	127,559	208,091	242,734	300,746	349,839	412,609	457,523	465,792
Employment	14,867	15,582	17,226	21,206	23,581	26,552	28,720	31,080
Employment in December	7,835	7,860	8,540	10,095	10,672	11,641	14,027	14,466
Business facilities	673	623	628	658	680	676	714	714
Average Salary (BRL in July 2016)	715	1,113	1,174	1,182	1,236	1,295	1,328	1,249
Workers w/ Undergrad. Degree (%)	3%	3%	2%	3%	3%	3%	3%	4%

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 20. Broadcast television segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	3,215,331	3,458,889	3,699,138	3,803,513	4,131,312	4,235,317	4,473,758	4,415,071
Employment	48,693	54,695	55,489	58,451	62,934	65,108	65,202	65,939
Employment in December	39,118	41,992	43,738	46,695	49,648	50,400	51,581	53,551
Business facilities	673	579	579	615	623	638	638	665
Average Salary (BRL in July 2016)	5,503	5,270	5,555	5,423	5,470	5,421	5,718	5,580
Workers w/ Undergrad. Degree (%)	32%	33%	34%	35%	37%	38%	40%	41%

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 21. Pay television segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	499,352	666,063	1,048,600	949,406	1,053,709	1,084,363	1,295,016	1,021,792
Employment	17,784	20,689	31,971	29,668	31,394	31,226	36,161	29,414
Employment in December	12,035	13,897	14,726	16,681	20,844	19,809	20,110	6,344
Business facilities	254	281	295	296	313	321	315	203
Average Salary (BRL in July 2016)	2,340	2,683	2,733	2,667	2,797	2,894	2,984	2,895
Workers w/ Undergrad. Degree (%)	32%	28%	29%	30%	18%	19%	18%	19%
Subscribers	5,349	6,321	7,474	9,769	12,744	16,189	18,020	19,518

Source: RAIS/MTE (Microdata), Anatel. Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Table 22. Audiovisual sales and rentals segment

	2007	2008	2009	2010	2011	2012	2013	2014
Payroll (Thousand BRL in July 2016)	297,965	389,487	404,314	392,982	377,599	365,080	344,874	319,852
Employment	35,182	28,918	28,364	26,442	24,564	22,428	20,291	18,212
Employment in December	18,004	15,089	14,719	13,894	12,734	11,639	11,025	10,031
Business facilities	6,651	5,763	5,265	4,839	4,380	3,996	3,587	3,178
Average Salary (BRL in July 2016)	706	1,122	1,188	1,239	1,281	1,356	1,416	1,464
Workers w/ Undergrad. Degree (%)	4%	4%	4%	4%	5%	5%	5%	6%

Source: RAIS/MTE (Microdata). Prepared by Tendências. Note: Figures have been adjusted by IBGE's Broad Consumer Price Index (IPCA).

Appendix IV—Audiovisual Industry Represented In The Sectors That Contain Its Activities

IOM Sector	Employees in the sector	Subsets of the sector (AV ones are highlighted)	Employees in AV	AV representativeness
		5911-1/01		
		5911-1/02		
		5911-1/99		
		5912-0/01		
		5912-0/02		
		5912-0/99		
5980	172,912	**5913-8/00**	119,376	69%
		5914-6/00		
		5920-1/00		
		6010-1/00		
		6021-7/00		
		6022-5/01		
		6022-5/02		
		6110-8/01		
		6110-8/02		
		6110-8/03		
		6110-8/99		
		6120-5/01		
		6120-5/02		
6100	338,203	6120-5/99	34,230	10%
		6130-2/00		
		6141-8/00		
		6142-6/00		
		6143-4/00		
		6190-6/01		
		6190-6/02		
		6190-6/99		
		4611-7/00		
		4612-5/00		
		4613-3/00		
		4614-1/00		
		4615-0/00		
		4616-8/00		
4680	13,819,818	4617-6/00	8,709	0,06%
		4618-4/01		
		4618-4/02		
		4618-4/03		
		4618-4/99		
		4619-2/00		
		4621-4/00		
		4622-2/00		

IOM Sector	Employees in the sector	Subsets of the sector (AV ones are highlighted)	Employees in AV	AV representativeness
		4623-1/01		
		4623-1/02		
		4623-1/03		
		4623-1/04		
		4623-1/05		
		4623-1/06		
		4623-1/07		
		4623-1/08		
		4623-1/09		
		4623-1/99		
		4631-1/00		
		4632-0/01		
		4632-0/02		
		4632-0/03		
		4633-8/01		
		4633-8/02		
		4633-8/03		
		4634-6/01		
		4634-6/02		
		4634-6/03		
		4634-6/99		
		4635-4/01		
		4635-4/02		
		4635-4/03		
		4635-4/99		
		4636-2/01		
		4636-2/02		
		4637-1/01		
		4637-1/02		
		4637-1/03		
		4637-1/04		
		4637-1/05		
		4637-1/06		
		4637-1/07		
		4637-1/99		
		4639-7/01		
		4639-7/02		
		4641-9/01		
		4641-9/02		
		4641-9/03		
		4642-7/01		
		4642-7/02		
		4643-5/01		

IOM Sector	Employees in the sector	Subsets of the sector (AV ones are highlighted)	Employees in AV	AV representativeness
		4643-5/02		
		4644-3/01		
		4644-3/02		
		4645-1/01		
		4645-1/02		
		4645-1/03		
		4646-0/01		
		4646-0/02		
		4647-8/01		
		4647-8/02		
		4649-4/01		
		4649-4/02		
		4649-4/03		
		4649-4/04		
		4649-4/05		
		4649-4/06		
		4649-4/07		
		4649-4/08		
		4649-4/09		
		4649-4/10		
		4649-4/99		
		4651-6/01		
		4651-6/02		
		4652-4/00		
		4661-3/00		
		4662-1/00		
		4663-0/00		
		4664-8/00		
		4665-6/00		
		4669-9/01		
		4669-9/99		
		4671-1/00		
		4672-9/00		
		4673-7/00		
		4674-5/00		
		4679-6/01		
		4679-6/02		
		4679-6/03		
		4679-6/04		
		4679-6/99		
		4681-8/01		
		4681-8/02		
		4681-8/03		

IOM Sector	Employees in the sector	Subsets of the sector (AV ones are highlighted)	Employees in AV	AV representativeness
		4681-8/04		
		4681-8/05		
		4682-6/00		
		4683-4/00		
		4684-2/01		
		4684-2/02		
		4684-2/99		
		4685-1/00		
		4686-9/01		
		4686-9/02		
		4687-7/01		
		4687-7/02		
		4687-7/03		
		4689-3/01		
		4689-3/02		
		4689-3/99		
		4691-5/00		
		4692-3/00		
		4693-1/00		
		4711-3/01		
		4711-3/02		
		4712-1/00		
		4713-0/01		
		4713-0/02		
		4713-0/03		
		4721-1/02		
		4721-1/03		
		4721-1/04		
		4722-9/01		
		4722-9/02		
		4723-7/00		
		4724-5/00		
		4729-6/01		
		4729-6/02		
		4729-6/99		
		4731-8/00		
		4732-6/00		
		4741-5/00		
		4742-3/00		
		4743-1/00		
		4744-0/01		
		4744-0/02		
		4744-0/03		

IOM Sector	Employees in the sector	Subsets of the sector (AV ones are highlighted)	Employees in AV	AV representativeness
		4744-0/04		
		4744-0/05		
		4744-0/06		
		4744-0/99		
		4751-2/01		
		4751-2/02		
		4751-1/00		
		4753-9/00		
		4754-7/01		
		4754-7/02		
		4754-7/03		
		4755-5/01		
		4755-5/02		
		4755-5/03		
		4756-3/00		
		4757-1/00		
		4759-8/01		
		4759-8/99		
		4761-0/01		
		4761-0/02		
		4761-0/03		
		4762-8/00		
		4763-6/01		
		4763-6/02		
		4763-6/03		
		4763-6/04		
		4763-6/05		
		4771-7/01		
		4771-7/02		
		4771-7/03		
		4771-7/04		
		4772-5/00		
		4773-3/00		
		4774-1/00		
		4781-4/00		
		4782-2/01		
		4782-2/02		
		4783-1/01		
		4783-1/02		
		4784-9/00		
		4785-7/01		
		4785-7/99		
		4789-0/01		

IOM Sector	Employees in the sector	Subsets of the sector (AV ones are highlighted)	Employees in AV	AV representativeness
		4789-0/02		
		4789-0/03		
		4789-0/04		
		4789-0/05		
		4789-0/06		
		4789-0/07		
		4789-0/08		
		4789-0/09		
		4789-0/99		
7700	378,,381	7711-0/00	11,582	3%
		7719-5/01		
		7719-5/02		
		7719-5/99		
		7721-7/00		
		7722-5/00		
		7723-3/00		
		7729-2/01		
		7729-2/02		
		7729-2/03		
		7729-2/99		
		7731-4/00		
		7732-2/01		
		7732-2/02		
		7733-1/00		
		7739-0/01		
		7739-0/02		
		7739-0/03		
		7739-0/99		
		7740-3/00		
1800	182,690	1811-3/01	1,156	0,63%
		1811-3/02		
		1812-1/00		
		1813-0/01		
		1813-0/99		
		1821-1/00		
		1822-9/01		
		1822-9/99		
		1830-0/01		
		1830-0/02		
		1830-0/03		

Prepared by Tendências.

♦♦♦