

THE NORTH AMERICAN AND JAPANESE CINEMA
INDUSTRIES
A Research Into The Declining Profitability of Movie
Theaters

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FINANCE ZEMINAR

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Summary

The purpose of this thesis was to analyze the struggling cinema industries of both the United States and Japan. With such a large industry as movie production, one would expect box offices to be increasing each year, especially with the constant records being broken by the summer blockbusters every year. However, the truth is that the general market is on a decline. The questions to be tackled in this thesis are: 1) “Does the influxes in box office correlated with a country’s GDP and income of its population?”, 2) “Is the movie box office on a decline, and if so, to what extent?”, and 3) “What strategies are being employed already by cinema companies to counter declines?” In the end, I will offer a strategy for the Japanese market to help battle against diminishing sales. My general hypothesis that I will attempt to tackle is “Movie theater profitability and attendance is directly correlated with the prosperity of a country.” The logic behind this hypothesis is that when people are making more money, logic dictates that they will spend more on leisurely activities, which includes movies. Furthermore, since movies represent one of the cheapest forms of leisure activities, it will be the foremost easily accessible activity across income brackets.

The report is broken into three different main chapters. The first chapter gives a thorough background into the development of cinema within the United States and Japan. Learning the background is important as it helps to identify when cinema attendance met its peak, and then help

determine where and how the decline began. After understanding the basic backgrounds of both markets, chapter two then delves into an analysis of the American and Japanese cinema markets. Chapter three then presents a strategy for the Japanese industry specifically, as the Japanese cinema industry is very different from the rest of the world's.

The findings of this research was that in the US, attendance rate and income of movie theaters were almost perfectly tied with the nation's GDP and prosperity. In other words, as the nation goes through economic growth, more people will go to see movies. However, in Japan, the correlation is negative, which means that no matter whether or not the economy prospers or suffers, the movie industry will remain nearly unaffected. Furthermore, the decrease in cinema attendance tends to be the same across both cultures: ticket prices are too high, and people want to watch movies in the comfort of their own homes.

Keywords: United States, Japan, Movies, Box Office, Market Trends

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CHAPTER 1. PURPOSE OF STUDY

The purpose of this thesis was to analyze the struggling cinema industries of both the United States and Japan. With such a large industry as movie production, one would expect box offices to be increasing each year, especially with the constant records being broken by the summer blockbusters every year. However, the truth is that the general market is on a decline. The questions to be tackled in this thesis are: 1) “Does the influxes in box office correlated with a country’s GDP and income of its population?”, 2) “Is the movie box office on a decline, and if so, to what extent?”, and 3) “What strategies are being employed already by cinema companies to counter declines?” In the end, I will offer a strategy for the Japanese market to help battle against diminishing sales. My general hypothesis that I will attempt to tackle is “Movie theater profitability and attendance is directly correlated with the prosperity of a country.” The logic behind this hypothesis is that when people are making more money, logic dictates that they will spend more on leisurely activities, which includes movies. Furthermore, since movies represent one of the cheapest forms of leisure activities, it will be the foremost easily accessible activity across income brackets.

The topic of cinema attendance decline is especially important in a time of demographic deflation, especially in Japan. Even though theaters continue to struggle to attract growing attendance, little research has been done in order to solve this problem. Furthermore, the general outlook in Japan by movie companies is to ignore the decreasing attendance rates, and to solve it by putting out movies in a greater frequency, without real attention to content to popularity. This leads to the degradation and saturation of Japanese cinema, of which the effects can be seen in the dwindling global appreciation of Japanese film.

Section 1. SET BACKS ENCOUNTERED DURING THE RESEARCH

During my research and analysis, there were a number of setbacks and unaccounted for variables that hindered my research. One was the limit in the amount of information and data available regarding box office sales. For the US, box office sales began track keeping from the 1980s.

This limited the amount of data that was available for me. Furthermore, when I wanted to check the inflation rate for the United States, the data for 2014 had yet to be filed through the US Census.

The Japanese market had much greater limitations. Japan remains a very non-translucent society, and not a lot of information is made available. This is especially true for the theater industry, which is held by movie production companies, and therefore ticket sales and such are fixated into annual income as a total, rather than individually. As such, I had to make estimates by taking the box office totals for individual months, then adding them up. Obviously, this results in some variances, but remains unavoidable due to the limited bookkeeping and publishing within Japanese business. Furthermore, unlike the U.S., who's data was available from the 1940s, the information for the Japanese box office was only available from the year of 1960s. Even though a number of resources were used to find data, the earliest box office data available was from the year 1960s. Furthermore, the data published in each database differed from each other, creating more discrepancies. In the end, after vetting each database, I decided to go with one that I deemed most reliable, which was the data from Statistics Japan (総務省統計局). In instances where there were discrepancies across different databanks that were not as significant (ex: one databank has an amount of 1.2 while another has one of 1.3), the average was taken between the different databanks. The discrepancies across different databases represent a problem that in Japan which will be explained in the Japanese market analysis section.

CHAPTER 2. BACKGROUND OF THE FILM INDUSTRY

Section 1. THE AMERICAN FILM INDUSTRY

Before delving into the analysis of the film industry, a thorough explanation into the history and background of film is necessary in order to understand how the market arrived at its current situation.

First is the background of the American Film Industry. The film industry of the United States has a very long and profound origin. The first instance of motion pictures dates back to June 15, 1878. Captured and created by Eadweard Muybridge, an English photographer.¹ The piece, titled *Sallie Gardner at a Gallop*,² was a 24 frame succession of images displayed on a zoopraxiscope that showed the race horse, Sallie Gardner. Muybridge conducted the shoot with the purpose of determining if a horse ever lifts all four of its legs at one time while running. The piece was presented at California School of Fine Arts.

About the same time, Thomas Edison was also working on the invention of the phonograph. Introduced on November 29, 1877³, Thomas Edison's phonograph reciprocated the voices of anyone it recorded. It's first recording was of Edison himself saying, "Good morning. How do you do? How do you like the phonograph?" Edison would later meet Muybridge after a presentation of *Sallie Gardner at a Gallop*, and the two would exchange ideas at Edison's West Orange, New Jersey research facility. Although the two would not officially collaborate on an invention, Edison would become inspired in the invention of the kinetoscope in 1884, which would become the precursor to the movie camera.

The film industry began its origins in the 1890s through traveling exhibitors that would show off its works, much like a traveling circus or traveling salesman. These films would be of simple scenes, usually something slapstick comedy related. Then, in 1885, Thomas Edison purchased the

¹ Clegg, Brian (2007). *The Man Who Stopped Time*. Joseph Henry Press. ISBN 978-0-309-10112-7.

² "Sallie Gardner at a Gallop". *San Francisco Museum*. Retrieved 2015-05-30.

³ Oliver Berliner and Patrick Feaster, "Letters to the Editor: Rethinking Edison's Discovery of the Phonograph Principle," *ARSC Journal* 38:2 (Fall 2007), 226-228.

Phantoscope from Charles Francis Jenkins and Thomas Armat, and rebranded it as the Vitascope. Edison later sold the Vitascope in limited numbers to vendors, which would give rise to the first dedicated “picture house” to be constructed in the New Orleans, Louisiana in 1896⁴.

2.1.1. Hollywood

Despite its current “tinsel town” reputation, Hollywood began its origins as a small village on the outskirts of Los Angeles. It was in 1910 when the Biography Company, the first motion picture production dedicated company in the United States, sent director David Llewelyn Wark Griffith to film a biograph film about 19th century California. Griffith instantly fell in love with the kindness that the few inhabitants of Hollywood gave him, and decided to stay there for a prolonged stay, and filmed a number of films there before returning to New York. His films met with success, and other film makers immediately started to make their way towards Hollywood after hearing of Griffith’s experiences there, and to avoid taxation fees placed upon by Thomas Edison in other more popular parts of the United States.

Due to the flocking of directors, Hollywood quickly blossomed prior to the outset of World War I as filmmakers went from filming in various cities across America to Hollywood. Filmmakers were attracted to the constant good weather, allowing for year-round filming. Due to the freedom and relatively new industry of filmmaking, the industry particularly contracted Jewish immigrants, who were barred from working in other industries due to religious prejudice. This historical fact still has grounds in the industry today with prominent directors and producers being Jewish, and a constant gag in many comedies. The two largest film studios at the time were Edison and Biograph.

The first movie production company in Hollywood was the Nestor Motion Picture Company.⁵

Ironically, after annexation into Los Angeles County, theaters were banned in Hollywood.

⁴ "Where was the first permanent movie theater in the United States located? | Blake Pontchartrain™: New Orleans Trivia | Gambit New Orleans News and Entertainment". Bestofneworleans.com. (Accessed: April 23, 2015)

⁵ Friedrich, Otto (1986). *City of Nets: A Portrait of Hollywood in the 1940s*. Berkeley and Los Angeles: University of California Press.

2.1.2. Movie Theaters



Jewish businessmen in Hollywood developed a new venue strictly for the viewing of films. Called “nickelodeons” due to the admission price of a nickel for each movie, the first nickelodeon theater (shown on the left) was established in Pittsburg, Pennsylvania on June 15, 1905 by Harry Davis and John P. Harris.⁶

Nickelodeon theaters were often of converted convenience store fronts, and would seat less than 200 patrons while larger ones would seat up to 1000. The inside of the theaters had hard wooden seats, a backdrop for the screen, and a piano on the side to provide ambience music. The success found by Davis and Harris quickly spawned hundreds of imitators across the country. Between the years of 1907 and 1908, the number of nickelodeon theaters grew to 8000 across the country, and it was estimated that patronage to these theaters across the United States reached 26 million per week as of 1910.⁷ Movie theaters throughout the ages have evolved to include film festival exhibitions, motion picture exhibitions for airlines, operating drive-in movie theaters, and operating movie theaters (IBIS 2).

In 1948, a very important litigation occurred between the United States and Paramount Pictures, which led to the barring of production companies from owning their own public movie theaters. During this era, the United States Federal Trade Commission began investigating the

⁶ Lightner, E.W. *Pittsburg Gave Birth to the Movie Theater Idea*, *The Dispatch*, November 16, 1919

⁷ Bowser, Eileen (1990). *The Transformation of Cinema, 1907-1915*. Berkeley: University of California Press. pp. 4–6.

possibility of movie production companies violating the 1890 Sherman Antitrust Act.⁸ The Sherman Antitrust Act prevents federal government regulated industries from anti-competitive activities which could lead to monopolistic or cartel-like markets. Prior to this litigation, known as *United States v. Paramount Pictures, Inc.*, five major film studios owned had owned movie theaters to screen their movies, along with all production processes. This was viewed as vertical integration by the Federal Trade Commission, and led to an oligopolistic market. The case ended with a 7-1 ruling against film studios by the U.S. Supreme Court. The implications of the case resulted with the break-up between movie theaters and production companies.

2.1.3. Film Exchanges and Evolution to the Current Film Market

Nickelodeon theaters represented the true start of the modern cinema industry. As longer runtime films became more dominant starting in 1903, filmmakers needed to make their change from traveling viewing to more stable venues, of which nickelodeon theaters represented the opportunity. This gave birth to a new market venue dubbed the “film exchanges.” The business model behind these venues was to allow independent filmmakers, a majority of filmmakers at the time, a market to sell their films to theaters, mainly nickelodeon theaters.⁹ Films sold in these venues were non-returnable, and most of the films, should they be properly maintained, could last up to 300 showings before literally disintegrating due to the generally brittleness of film reels at the time. Despite the bustling exchanges across the country, estimated to have grown to about 100 across the country¹⁰, the business model was ended in 1908 after the Motion Picture Patents Company (MPPC, or the Edison Trust) sued the independent film companies on the grounds of patent infringement. Since these independent companies were small and had a very limited budget, most of them were forced to close in the wake of being unable to fight against the MPPC. However, some independent companies were able to stay afloat by incorporating with each other.

With the end of the film exchanges, a new way for distribution was necessary. The answer

⁸ William O. Douglas, *United States v. Paramount Pictures Inc.*, 334 U.S. (Accessed: June 22, 2015)

⁹ Davis S. Hulfish, *The Motion Picture: Its Making and its Theater* (Chicago: Electricity Magazine Corporation, 1909), 113.

¹⁰ Robert Sklar (1994). *Movie-Made America: A Cultural History of American Movies*. Vintage Books.

came in May 1914 when a Utah theater owner named W.W. Hodkinson founded Paramount Studios¹¹. Paramount Studios began a new distribution strategy by first classifying cities according to population size, and then determining the distribution price of their films to theaters depending on these sizes (the bigger the population size, the higher the price). Whereas, in the past, theaters were able to rent/purchase films for showing without restrictions, Paramount leased their films only to the largest theater with the highest ticket price in the distribution regions, with subsequent smaller theaters gaining the right to show the movie after its initial run had ended in the larger theaters. The lag time before the smaller theaters could buy Paramount's films for distribution was three months, a general rule that is still maintained presently.

Section 2. THE MODERN AMERICAN FILM INDUSTRY

In the modern American film industry, movies are categorized into two different categories: blockbusters and independent films. In order to stay profitable, movie production companies rely on the big blockbuster films that cost millions of dollars to produce. Rather than actual production costs itself, the money used to produce these movies mainly go into the paychecks of the actors (usually high paid, popular actors in order to attract fans) and into subsequent marketing campaigns. The concept behind the high costs is that the advertisement and recognizability of cast members will attract a high number of viewers, which will then offset the costs. With the success of blockbusters, production companies then have the freedom to make independent movies, which often have smaller budgets and are much limited in release, but are characterized with experimental methods of filmmaking and a much broader level of creative freedom for directors.

The theater industry has come under scrutiny from the US Federal Court recently for a possible divertive tactic used to bar movies from competing markets.¹² According to the U.S. Justice

¹¹ 'Combine of Feature Film Firms', *The Billboard* (30 May 1914): 46; 'Will Distribute Films', *New York Times* (21 May 1914): 11: 4; Elizabeth I. Dixon, *Pioneer Film Distributor: W.W. Hodkinson* (Los Angeles: Regents of the University of California, 1971), 111.

¹² Schwartzel, Erich. „U.S. Scrutinizes Conduct of Movie Theaters.”

<http://www.wsj.com/articles/justice-department-investigates-theater-clearance-practices-at-amc-1433171433>. Wall Street Journal. June 1, 2015.

Department's Antitrust Division, top movies theater chains have used several tactics, including "clearances" (the tactic where a theater chain makes a deal with a distribution company in order to have exclusive screening rights to a movie), in order to gain a greater market share. The main defendants in this case are the three largest chains in the United States: AMC, Regal, and Cinemark. The implication of the accusations is these larger movie companies are creating unfair boundaries to the movie industry market by making these "lucrative" deals, and consequently pushing out smaller competitors, creating an oligopolistic market. The legality of this accusation is that "clearances" goes against the past litigation of *United States v. Paramount Pictures, Inc.*

Section 3. A NEW EMERGING BUSINESS STRATEGY: PRIMA CINEMA

In the American market, a new company has been dabbling into a new market to stream movies directly to customers as the same day as the movies are



The PRIMA Cinema entertainment system

released in theaters. The company is called Prima Cinema, and is pegging itself as the "world's first and only company to deliver theatrically released Hollywood films directly to private home theaters." The company itself is a venture endorsed by Universal Pictures, IMAX Corporation, Best Buy Capital, Syncom Ventures, along with other private individuals. Based in San Diego and Los Angeles, California, PRIMA has access to the main movie production companies. In other words, PRIMA is inventing itself as another distribution system. They even claim that their streams have a higher quality than that of Blu-Ray discs.

How PRIMA works is movie companies (currently Universal Pictures, Focus Pictures, Magnolia Pictures Millennium, and Cinedigm) offer movies to PRIMA. It is expected that the number of companies that sign-up will increase. For a movie to get released through PRIMA, it is first sent to the company for encoding. The encoding process can only begin after the director for the movie signs off his permission. Meaning, the movie company can give the movie to PRIMA, but

PRIMA will not be able to distribute it without the final permission of the director. The movies are then automatically downloaded to PRIMA's specialized hardware: a receiver that can store-up to 50 2D or 3D movies through its built-in encoded hard-drives (the actual case for the receiver was designed by BMW's contract designer, DesignworksUSA). This download occurs a week prior to the theatrical release, but cannot be accessed until the release date. Once the timestamp expires, and the movie can be viewed, the customer needs to use his finger-print to access the movie. The resolution for the movies run at a 1080p/24 fps native, which doesn't differ from Blu-Ray, but the compression rate is twice that of Blu-Ray, making the picture seem more crisp. After viewing has

finished, the movie is automatically erased.

What's the catch behind this service? A whopping \$500 for each movie that you only get to watch once, not to mention the initial \$35,000 that comes with renting PRIMA's specialized hardware. Upon signing up, new users are required to pay \$5,000 up front for 10 movies. However, before even paying this cost, customers need to go through a vetting process by PRIMA in order to determine whether or not the interested party can even buy the service in the first place. To keep the service even more exclusive, in order to operate PRIMA's hardware, a fingerprint of the customer is taken, and used when the customer wants to watch the movie to make sure he/she is in the room when the movie is accessed. As a final step of security, the hardware is also locked so it only operates in one room and with a specific display screen, meaning that it cannot be moved once it has been set-up. PRIMA wants to make sure that its customers will not invite guests over to record the movie, and then post it online. PRIMA customers are simply so rich, that their equivalently rich friends have no incentives to pirate movies.

Obviously, this business plan is made for the wealthy. For those who are able to spend thousands on their own personal theater system, another \$35,000 to be able to watch first-runs of movies at home will be a little expense. The stringent screening processes and high market price is to ensure that the movies are protected from piracy. The truth remains that movie companies are highly afraid of same-day streaming options through services such as Hulu or iTunes, and rightly so. Even without streaming, movies still get leaked onto the internet upon or sometimes even before their release, which can cause movie companies and theaters thousands to millions of dollars. Theaters are known to be very protective of the movies they show, since their entire business model relies on new movies. PRIMA Cinema has made sure that its business poses no threat to movie theaters. In no way is it looking to replace the movie going experience for the general market, but creating a brand new market for elite buyers. Despite the high membership costs, PRIMA's co-founder and CEO Shawn Yaeger, told The Verge that he is having a hard time trying to keep up with the demand for the system.¹³

¹³Ziegler, Chris. *This is how rich people watched Fast & Furious 7 last week*. "The Verge," April 7, 2015. <http://www.theverge.com/2015/4/7/8361475/prima-cinema-luxury-movie-watching-furious-7>

Section 4. PRE-RELEASE LEAKS/PIRATING ON THE MARKET

Another negative effect on the cinema industry is pre-release pirating. This is when a movie is released online for free due to it being obtained illegally. Like any product in the world, movies are not free from pirates, and this eats into the movie theater's profits. Piracy is restricted to only pre-release leaks, since all movies go through piracy in their lifetimes.

Pre-release piracy obviously has a negative effect on the movie theater and cinema business. Although different points of piracy exist (theater window and home-video window), this section will focus solely on the effects of piracy during the theater window of a movie release. Surprisingly, the American movie companies are separated to the effects of pre-release piracy to the market. For example, when the movie "Hostel: Part II" leaked in 2007, Lionsgate responded that the leak "will have no meaningful impact on the box office."¹⁴ Ironically, when another Lionsgate film, "The Expendables 3," leaked in 2014, Lionsgate took legal action against the perpetrators.¹⁵

On the other hand, some even argue that piracy can even lead to increased profits in theaters, somewhat like free publicity. Pirated movies are usually very low quality, and the logic is that once people view the leaks, they'll want to watch the movie in actual theaters to experience the movie in high quality.

So at what point is pirating most harmful to box office sales? Research has shown that piracy during the theater window of a movie reduces box office revenue by up to 20% (Ma, Montgomery, Singh, and Smith 2013). Piracy tends to have a greater effect during the first few weeks of an initial theatrical window than it does in the later weeks. As the figure below shows, the number of pirated movies released increases during the week leading up to the theatrical window. Surprisingly, pirated movies have little differences in box offices. Table 1 in the Appendix shows the difference with the box office numbers of pirated movies to non-pirated movies.

¹⁴ <http://articles.latimes.com/2007/jun/01/business/fi-hostel1>

¹⁵ <http://variety.com/2014/digital/news/will-expendables-3-pre-release-piracy-hurt-box-office-revenue-1201271888/>

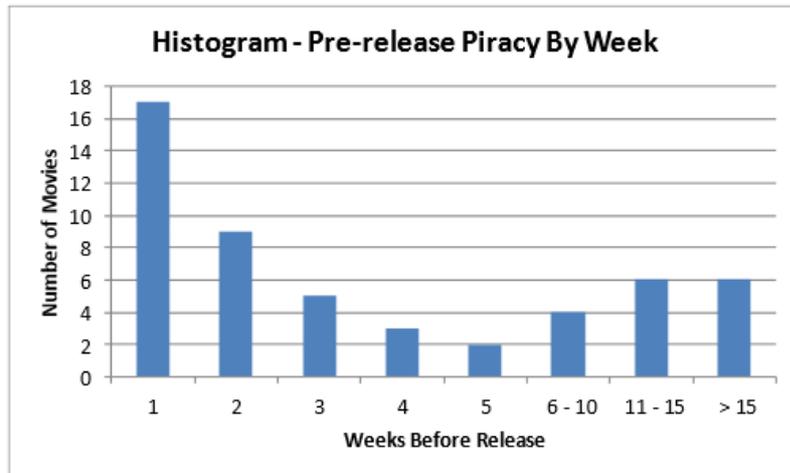


Figure: Number of pirated movies by week prior to a movie release.

The evidence eventually comes down to whether or not people would want to watch leaked/pirated movies, and to what extent they would still watch the movie in theaters after viewing the pirated version. All movies experience a rate of decline as theater run increases, but would pirating quicken this rate of decline? Carnegie Mellon University professors Liye Ma, Alan Montgomery, Param Signh, and Michael Smith attempted to calculate this effect. They devised an equation to help illustrate the effect of piracy on the theater industry. Their findings can be found in

the Appendix's Tables 2 and 3. A portion of the results are listed on the right. Here, it was found that non-pirated movies have a -0.4 (p-variable) coefficient effect on the movie's market potential. This means that throughout the movie's lifetime, it's boxes office will decline at a 40% decline in its final week, compared to its opening weekend. However, in the event of a pirated movie, the movie has a 0.49 decline, meaning that the potential will

Parameter	Estimate
Constant	7.4290(***)
τ	-0.0965(***)
ρ	-0.4024(*)
λ	0.7503(***)

Figure (above): Decline of non-pirated movies

Figure (below): Decline of pirated movies

Parameter	Estimate
Constant	7.9259 (3.1922)*
τ	-0.1204 (0.0280)***
ρ	-0.4874 (0.2228)*
λ	0.8232 (0.0264)***

decline by 49% upon the release of a pirated copy prior to official release. The decline is more intense in pirated movies, rather than in non-pirated movies. Overall, though, the timing of pre-release piracy has no timed effect on the sale of movies. Whether the pre-release piracy occurs 3 weeks prior to

release or one, the effect is generally both the same, with the box office sales decreasing, and the sales curve flattening for the movie. Although an earlier pre-release piracy reduces the market potential by -0.1999, it was found that this reduction was not significant enough.

In the end, it is true that movie theaters currently lack the power to fight piracy. Although fines and security are imposed to prevent piracy, the fact remains that piracy may very well be unstoppable. Furthermore, the websites that pirated movies are hosted on are all operated outside of the US, leaving US movie companies with little to no power due to international boundaries. For US companies to go after these pirated movie file hosting sites, companies need to spend large amounts of money to hire international lawyers and team with international companies to operate within the legal boundaries of the countries these sites are hosted in; a cost that is more expensive than simply ignoring the pirates. With only a mere -0.1999 market potential reduction, taking the passive route seems more logical. However, with the combined reduction in box office revenue for a movie being 20%, piracy leaves an impact on the movie industry.

So, how would one fight against piracy. I suggest implementing taxation on bandwidth usage. Pirating movies uses a large amount of bandwidth since the sizes of the files surpass a gigabyte. Most broadband internet services have a very large bandwidth cap for the average person, averaging at 10 gigabytes per month depending on the plan and provider. This would be more than enough for most customers, but for pirates, this would be very limited. By implementing a tax, companies can not only deter people from pirating, but gain money off of those who choose to pirate.

Furthermore, movie companies and theaters have actually implemented an incentive to watching movies in theaters: 3D. With most movies being released in 3D recently, the only way to truly enjoy them is in the theaters. Especially, in pirated copies of 3D movies, the screen is always much darker and blurred due to the 3D effect, making them essentially unwatchable. By creating these specialized experiences movie theater companies appeal with an experience that can only be experienced by going to the theater.

Section 5. THE JAPANESE FILM INDUSTRY

Next, let us move onto the history of the Japanese film industry. Much like the rest of the world, Japan's first introduction into motion pictures came with a demonstration of Edison's kinetoscope in

November 1896. However, Japan had already been experimenting with moving pictures prior to the introduction of the kinetoscope with devices such as the gento (幻灯)¹⁶. Japan first truly got their hands into film production with the import of the Gaumont camera, developed by French inventor Léon Ernest Gaumont, where it was used to film “fashionable geishas and the traditional restaurants of Shimbashi.”¹⁷ In 1899, the Japanese film industry began to blossom with Shibata Tsunekichi’s films of numerous kabuki and bunraku plays.

The Japanese film industries quickly entered its boom in the early 1900s, with many Japanese inspiring filmmakers quickly becoming enamored with motion pictures, and former *bunraku* actors yearning to make a life in the film industry. As such, during the silent film era of Japanese cinema, many film production companies began to emerge. However, as the silent era film industry was overthrown with the introduction of sound, these film companies quickly went bankrupt due to the high transition costs involved with changing over to sound cameras. Due to these high transition costs, Japan continued to produce silent films as long as it could, well into the 1930s, unlike Western cinema that quickly switched over to sound.

As World War II broke out in the 1940s, the Japanese film industry took a big hit as mass unemployment soared. Much like the rest of the world with their own cinema markets, Japan saw cinema as a way for propaganda. Most films during this period were of the war, and of Japan’s advances. However, during this time, in 1943, director Akira Kurosawa made his film debut with his film *Sugata Sanshiro* (姿三四郎). When the war ended, Japan was flooded with foreign cinema that had been banned within the country over the years. This led to the introduction of Western animated films, like Walt Disney’s works. Western animation would leave a large impact on the Japanese culture, which would lead to the rise of the globally popular Japanese anime industry in the future.

With the war over, and Japanese cinema once again able to flourish due to the influx of foreign cinema, Japan entered its cinema golden age in the 1950s. The top movie production companies during this time were Toho, Toei, Daiei, Shochiku, and Nikkatsu. The top theme during this period was how Japan dealt with the post-war Allied forces occupied Japan, with many of these films later becoming

¹⁶Iwamoto, Kenji (2002). *Gentō no seiki: eiga zen`ya no shikaku bunkashi = Centuries of magic lanterns in Japan*. Shinwasha.

¹⁷ Nakagawa, Yokichi. *Japanese Cinema and the Festival de Cannes*.
<http://www.festival-cannes.fr/assets/File/Filmographie%20Pays/Japanese%20Cinema%20and%20the%20Festival%20de%20Cannes.pdf>. Retrieved June 9th, 2015

well-proclaimed critiques of the era. Directors that arose in this period were Masaki Kobayashi (debut work: *My Son's Youth* 「息子の青春」), Kenji Mizoguchi (debut work: *Sisters of the Gion* 「祇園の姉妹」), and Yasujiro Ozu (debut work: *Sword of Penitence* 「懺悔の刃」), along with the continued popularity of Akira Kurosawa. All four directors quickly claimed popularity within the international environment, garnering praise from fellow directors such as America's Orson Welles and France's Jean-Luc Godard. In 1951, Japan would release its first color film, *Carman Comes Homes* (カルメン故郷に帰る).

The Japanese film industry peaked in 1960, with most movies being shown in theaters as double-bills (two movies shown back-to-back for the price of a single ticket). One movie would be a “b-movie” (easily produced, low-cost film), and the other being the main picture. The demand for these “b-movies” quickly grew, with Japan finding its love for long-running series movies, a trend that continues well into today. As a result, movie production companies also declined greatly, with companies like Toho and Toei struggling. Movie theaters also took a hit, which will be touched upon in the next section.

2.5.1. Movie Theaters

Despite the growth of film and cinema in Japan, stage theaters with kabuki and bunraku plays still held a very great majority in the 1900s. Movie theaters began their boom in Japan after the First World War in 1915.¹⁸ These theaters were modeled after American theaters, characterized with big signs displayed on the front. Inside the theater, the floors were composed of bare concrete that gave off a black appearance with walkways divided by planks of wood. There were no seats in the theaters, with all theaters being standing-only partitioned by wooden poles. The screens themselves were made of either plain white concrete or white fabric, and were further covered with aluminum or other highly reflective material. Also, unlike American movie theaters with pianos placed near the screen to provide background music, Japanese theaters would hire actors to narrate the story, and would have a space for a small orchestra to provide the music.

Movie theaters in Japan were divided into three different categories: the large movie theaters

¹⁸ Kafujikara, Akira. (2006) *The History of Theaters and Their Customers* (映画館と観客の文化史). Nakako Publications

that played first-showings of movies, smaller theaters that played only independent films, and the after-release theaters that played movies after their larger theater runs had ended.

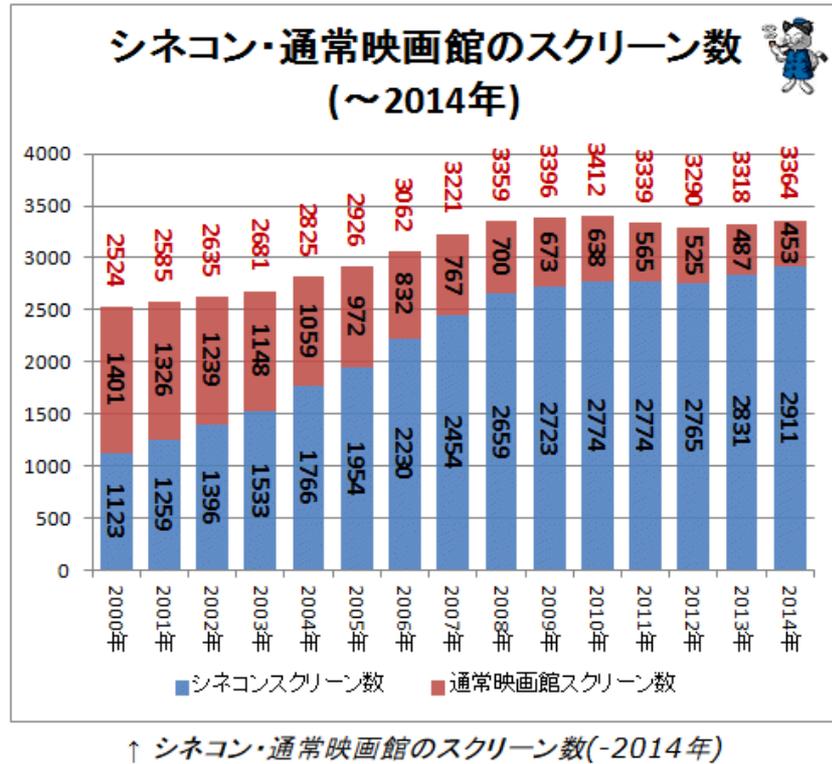
As the movie industry bloomed, so did the amount of movie theaters. Much like the rest of the world, with the onset of home television, the demand to watch movies in movie theaters quickly dropped in the 1970s. By the 1980s, the attendance rate for movie theaters dropped from 1.2 billion in the 1960s to 0.2 billion attendees.¹⁹ However, the movie theater industry found a new boom with the introduction of the multiplex in the 1990s. This was made possible with the boom of shopping centers and large buildings, allowing for the space for multiple movie screens in a single building, and reducing the leasing costs for theater companies.

Japan has a trend of holding onto older forms of technology for as long as possible as a way of countering the high transition costs of switching over to the new technology, and movie theaters are no exception. The transition bar was first seen when Japan held on to the silent film productions even though sound film was introduced. In the recent decade, Japan has slowly made the transition over to digital projection in theaters. As of 2013, 3,172 screens throughout Japan have transitioned from film to digital projections. In order to accommodate new digital projections, many theaters must go through renovation to truly take advantage of the qualities of digital projection. The fact remains that many Japanese movies are still shot on traditional film, since production facilities at movie companies still operate mainly on film editing systems.

Japan has also been pushing for the continued growth of mobile devices and home entertainment. The mobile market is especially growing in Japan, and people are constantly on the move. The entertainment industry is embracing this change, but that actually has a negative effect on the Japanese theater market. Even though the movie theaters appear to be on the rise, as reported by this year's Motion Picture Producers Association of Japan, Inc. (一般社団法人日本映画製作者連盟) that may not be the case. Prior to the year 2000, Japan used to count the number of movie theaters by structure. After the year 2000, Japan switched their counting method to the number of screens rather than the actual structure itself. The figure below shows the number of screens (blue) versus

¹⁹ Sato, Tadao (1982). *Currents in Japanese Cinema*. Kodansha. p. 244.

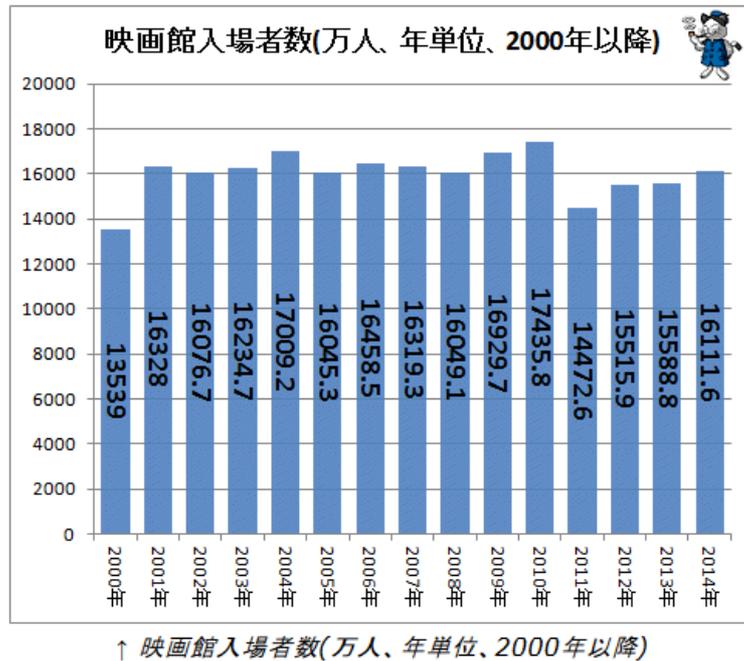
the number of conventional theaters (red). In this chart, we can see that while the number of screens are on the rise by almost 100 screens per year since 2012, the actual number of theaters is on a decrease. In other words, “Cinecons”



↑ シネコン・通常映画館のスクリーン数(-2014年)
 Figure: (Blue) Number of Cinecon screens; (Red) Number of theaters
 (source: <http://www.garbagenews.net/archives/2034792.html>)

(multiplex-like theaters built inside regular buildings) are on the rise, but independent theaters are being torn down quickly. Movie theaters are becoming more central focused into specific areas, especially as the population shift continues towards city environments, and away from suburbs and the country-side. The neighborhood movie theater gets removed, while the capacity for Cinecon screens begins to reach a maximum. The problem behind this is that the number of people that have access to movie theaters decreases, which propels the desire to move into metropolitan environments, and away from the suburbs and country-side.

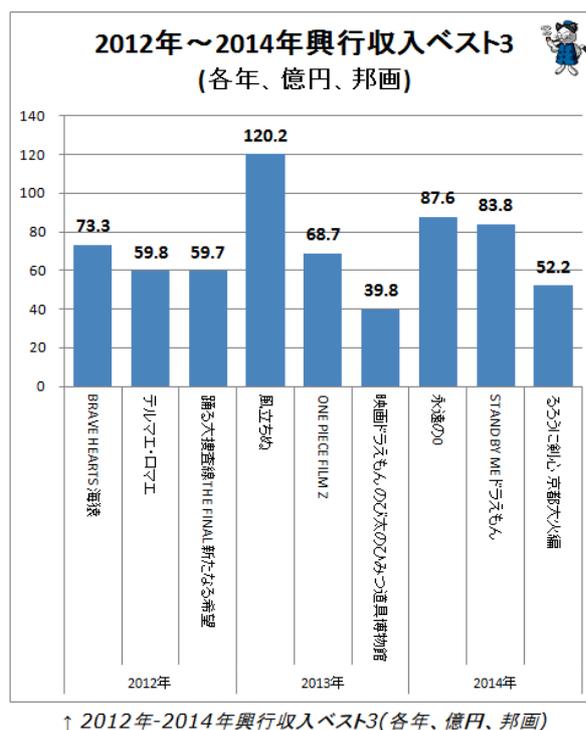
The general attendance rate for the Japanese market has been generally constant for the past decade. The graph to the right shows the number of attendees to theaters. There was a boost from 2008 to 2010 thanks to foreign movie hits like “Harry Potter and The Half-Blood Prince” and “Alice in Wonderland.” This was followed by a sharp decrease due to the 2011 Sendai Earthquake.



Number of Attendees in Japanese Movie Theaters

(source: <http://www.garbage news.net/archives/2034792.html>)

The top Japanese films in the box office from 2012 through 2014 are listed below. For 2014, the top box office film was “Eternal Zero” (永遠のゼロ). The chart also shows that Japanese movies generally draw in little attention, despite attempts at promoting the titles. The highest grossing domestic Japanese film to reach near foreign film level income was 2013’s *The Wind Blows* (風立ちぬ) by director Hayao Miyazaki.



Section 6. MODERN JAPANESE FILM INDUSTRY

Japanese film greatly declined after the passing of three Japanese filmmakers: Kenji Mizoguchi, Yasujiro Ozu and Akira Kurosawa. These three directors inhabited a time known as the Golden Age of Japanese Cinema, which spanned from the 1950's through to the 1960's, when Japanese movies garnered high praise from the Western worlds, influencing many Western directors, including director George Lucas.

The number of films being shown in Japanese theaters increased in 2006, with movies based upon television shows particularly garnering attention. The era was also characterized with a resurgence of the “samurai” genre, with remakes of movies such as *Zatoichi* (座頭市) and *Silent Samurai* (たそがれ清兵衛), although live-action Japanese movies would never again reach the influence and popularity that they once experienced in the late 1900s.

The growth of the Japanese box office was greatly influenced by the sudden increased popularity of Japanese anime. The popularity of anime gave birth to an era regarded as the second

Golden Age of Japanese Cinema spanning from 1990-2000.²⁰ Anime was estimated to account for 60% of all Japanese film production at the time. In 2002, director Hayao Miyazaki would become the first foreign director to win the Academy Awards' Oscar for Best Animated Feature Film for his film *Spirited Away* (千と千尋の神隠し). Miyazaki and Studio Ghibli would go on to become a household name in foreign countries.

²⁰ Dave Kehr, *Anime, Japanese Cinema's Second Golden Age*, The New York Times, January 20, 2002.

CHAPTER 3. ANALYSIS OF THE MOVIE THEATER INDUSTRY

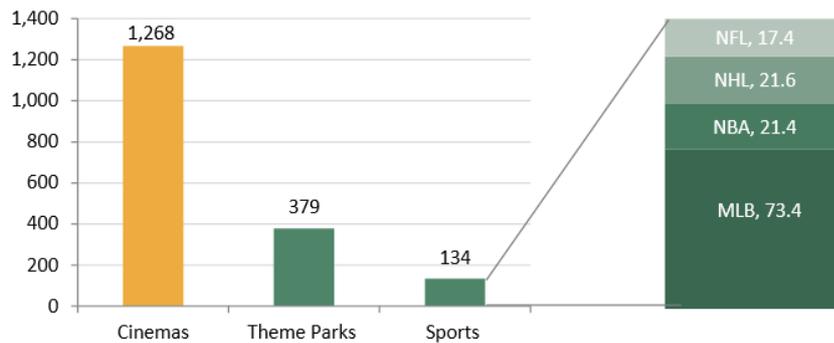
Section 1. AMERICAN MOVIE THEATER INDUSTRY ANALYSIS

The following section is a summarization of a yearly study conducted by the Motion Picture Association of America, and released in a document called “Theatrical Market Statistics” for the year of 2014. Although the study also looks at the global movie theater industry, I will focus on the North American portion of the study. The study was conducted with a sample population of 4,031 US citizen adults, of which 2,010 were men and 2,021 were women, both gender demographics were over the age of 18. More specifically, all sample participants lived in privately owned households.

The American movie theater industry is undeniably undergoing a slump. According to a yearly study released by the Motion Pictures Association of America, in 2014, the U.S. and Canadian box office was \$10.4 billion, down 5% from the previous year’s \$10.9 billion. 14% of the market income was contributed to 3D movies, also down 2% from the previous year. The figure below shows the steady decrease of the 3D movie box office since 2010, where it peaked at 21% of total box office gross. In fact, 3D movie viewership remains the lowest sales market for watching movies.



Despite this decrease, movie theaters in the United States still attract more attendance than theme parks and sporting events combined, as seen in the figure below.



Ticket prices in the United States also increased by an average of 4 cents, which accounts for a less than 1% increase from prices of the previous year. The price for tickets nationwide averaged at \$8.17. The change in ticket prices can be seen in the figure below. Despite rises in prices, movies still represent one of the cheapest means of entertainment for a family of four, averaging at a total price of \$32.68, well below the average price of theme parks, which comes in at \$208.92.

Average Cinema Ticket Price (US\$)

Sources: National Association of Theatre Owners (NATO) (Ticket price), Bureau of Labor Statistics (BLS) (Consumer Price Index)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Average Ticket Price	\$6.41	\$6.55	\$6.88	\$7.18	\$7.50	\$7.89	\$7.93	\$7.96	\$8.13	\$8.17
% Change vs. Previous Year	3%	2%	5%	4%	4%	5%	1%	0%	2%	0%
% Change vs. 2014	27%	25%	19%	14%	9%	4%	3%	3%	0%	n/a
CPI % Change vs. Previous Year	3%	3%	3%	4%	0%	2%	3%	2%	2%	2%

Despite the large success of blockbuster films, and the public perception of Hollywood being the “tinsel town” it is today, the American film industry remains one of the most unstable and volatile industries. In their annual report about movie theaters in the United States, IBIS World stated that the risk of the film industry is tied to that of the American market. Meaning, as economical swings occur within the American market, concurrent risks will also occur in the movie theater industry. However, due to positive growths in the American economy, the overall risk for the North American theater industry was deemed as MEDIUM-LOW.

There are currently 40,024 operating movie theaters in the United States (39,368 indoor; 656 drive-in). A complete list of theater companies (both commercialized and private) can be found in the Appendix’s Table 1. The three largest companies in the United States, in order from most number of screens, are Regal Entertainment Group (7,367 screens), AMC Entertainment Inc. (4,960 screens), and

Cinemark USA, Inc. (4,499 screens).

3.1.1. Demographic

The age demographic for movie goers have been divided into the following ranges: 7-13, 14-17, 18-24, 25-34, 35-49, 50-59, and 60+.

The demographic for movie goers comes in mainly at the 25-39 years age range. This demographic range has been characterized as the college educated intellectuals raised from the cultural outbreak of the 1980's and early 1990's. Of this demographic, Caucasian attendance makes up the majority at 63%. Figure 4 breaks down the demographic further. The younger demographic (ages 18-24) have shown that they are more easily influenced by surroundings in regards to their movie attendance.

Amongst gender demographic separations, the market saw an increase in spending in the female demographic. The female demographic accounted for 52% of the total movie goer market in 2014. However, this demographic obviously fluctuates from year-to-year depending upon the genre of movies released. For example, in 2014, the movie *Hunger Games: The Mockingbird Part 1* drew in a large number of female viewers, with 57% of its total ticket sales coming from the female audience.

Between ethnicities, Caucasians make-up the largest demographic with 54% of tickets sold in 2014, followed by the Hispanic population with 23%, the African American population with 12%, and finally Asian and Others with 11%.

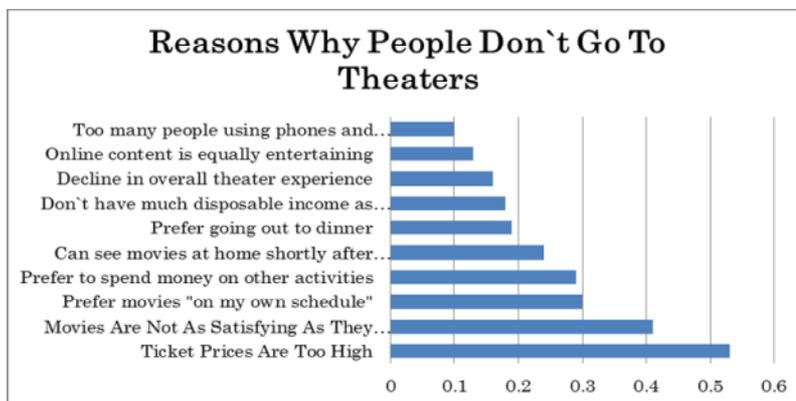
3.1.2. A Shifting Marketing

With the rise of on-line streaming media like Netflix and Hulu, the market has been making a dramatic shift away from the movie theater in recent years. In fact, it was found that 87% of people are willing to pay a higher price than currently to watch a newly released movie in the comfort of their homes instead of going to the movie theater (PWC, pg. 4). With the increasing number of

Although movie theaters are not exactly on a decline, they definitely need to do more to increase their attendance. Movie theaters remain the biggest market for watching movies. In fact, the attendance ship for 2014 increased in demographics compared to the previous year. The younger population is going more to the theaters than the previous year.

3.1.3. Reasons for a Decreasing Market

Despite an increase in the youth demographic going more to the watch movies in movie theaters, the overall market is experiencing a contraction. A study by PwC published the main reasons as to why attendances to movie theaters have been decreasing. The main reason as to why people do not like to go to movie theaters is predictable with 53% responding that ticket prices are too high. Movie goers have voiced their discontent with this by arguing that “they’re paying more for the same experience that they’ve always had.”²¹ The second reason is that people are not attracted to the content being released in movie theaters, coming in at a response of 41%. A chart showing the reason as to why people do not go to theaters is shown below.



Section 2. JAPANESE MOVIE THEATER INDUSTRY ANALYSIS

The Japanese box office itself is still very much influenced by Western cinema, with a majority of the top opening weekend movies being foreign films, except for the 4th top opening movie being the Japanese animated film “One Piece Film Z.” Yet, the Japanese box office still plays a very important part in the total box office for foreign movies, coming in at an average 20% of total box office income. However, in general, Japanese films dominate the domestic market, garnering a 58.3% total box office share in 2014. Albeit, this number has decreased from 2013’s 60.8%.

As of 2014, there are 3,364 screens in Japan(MPPAJ, 2014). There were a total of 1,184 showings of movies across the country, with 615 being Japanese films and 569 being Western films. There were a total of 161,116,000 attendees, a rise from 155,888,000 attendees from 2013. The average

²¹ Siegal, Jacob. “Study reveals why we stopped going to the movie theater.” <http://bgr.com/2015/01/15/movie-theater-ticket-prices/>. BGR Media. Jan 15, 2015

ticket price was

Japan has a very unique market where the movie industry has vertically integrated itself. The Japanese market is the only market in the world to have a vertically integrated movie industry. Whereas the United States had vertical integration viewed as unlawful thanks to *United States v. Paramount Pictures, Inc.*, Japan has had no such case to make vertical integration illegal. In Japan, the vertical integration has given rise to what has been dubbed “The Trinity” (三位一体), which consist of the divisions, Production, Distribution, and Exhibition. In the American industry, Production and Distribution are usually controlled by the movie production company, except in the case of independent films, while Exhibition is reserved for the movie theaters. In Japan, these three are all controlled by the same entity working in different departments. For example, the Japanese movie company Toho also has a distribution division for their films, which are only shown in Toho Cinema movie theaters.

The negatives behind vertical integration (known as 系列 *keiretu* in Japanese), is that it limits competition amongst the integrated industries. Furthermore, vertical integration causes companies to take on more debt due to the number of integrated companies held across different processes, which would effectively cause companies to take more risky strategies. In essence, because companies/divisions within a vertical integration group has access to larger monetary resources, they will believe that they can get funds more easily, allowing them to invest in more risky projects than would be taken in non-integrated industries.

At the same time, vertical integration also holds its advantages. Being vertically integrated allows for greater information sharing within the company across divisions. For example, American movie production companies would not be able to easily obtain statistical information from theaters, while Japanese companies will have statistical information on hand due to the ownership across the different platforms. Also, theoretically, the costs within a vertical integration would decrease, since costs that would usually occur when a film is delivered from a production company (the producer) to a movie theater (the client) would be eliminated, since the company is both the producer and the client.

Let us closely examine whether a vertically integrated movie industry in Japan is either a good or bad idea. To do this, I will be using the market characteristics that would make a vertically integrated industry unappealing that have been laid out in the book *Strategic Outsourcing* by Maurice Greaver.

As stated by Maurice Greaver, a financial and market consultant, market characteristics that would make a vertically integrated industry unfavorable are:²²

1. The quantity required from a supplier is much less than the minimum efficient scale for producing the product.
2. The product is a widely available commodity and its production cost decreases significantly as cumulative quantity increases.
3. The core competencies between the activities are very different.
4. The vertically adjacent activities are in very different types of industries. For example, manufacturing is very different from retailing.
5. The addition of the new activity places the firm in competition with another player with which it needs to cooperate. The firm then may be viewed as a competitor rather than a partner

First off is the market characteristic that the quantity required by suppliers (movie theaters) is less than the minimum efficient scale for producing a movie. For this characteristic, the market is favorable for vertical integration. Movie theaters require a large amount of movies in order to keep their attendance right at a constant growth. This characteristic of the Japanese market is in favor of vertical integration.

For the second characteristic, movies are certainly a widely available commodity, with or without movie theaters. Production costs also decrease as circulation and quantity increase. In other words, as more screenings are available for movies in multiple theaters, the profits would increase due to greater viewership. This characteristic of the Japanese market is against vertical integration.

The third characteristic states that the core competencies, in this case the distribution of movies and the actual production itself, are very different, in which they are. The core competencies of film production are a very much creative approach, while the movie theater industry is a business aspect of distribution. This characteristic of the Japanese market is against vertical integration.

The fourth characteristic is that the vertically integrated activities are different from each other. For movie production and movie exhibition, the two could not be more different. As stated in the third characteristic, film production is about creativity, much like any other production industry. The goal is to create a product. Movie theaters, on the other hand, are the retailers for said product. They

²² Greaver, Maurice F., *Strategic Outsourcing : A Structured Approach to Outsourcing Decisions and Initiative*. AMACOM Div American Mgmt Assn. 1999

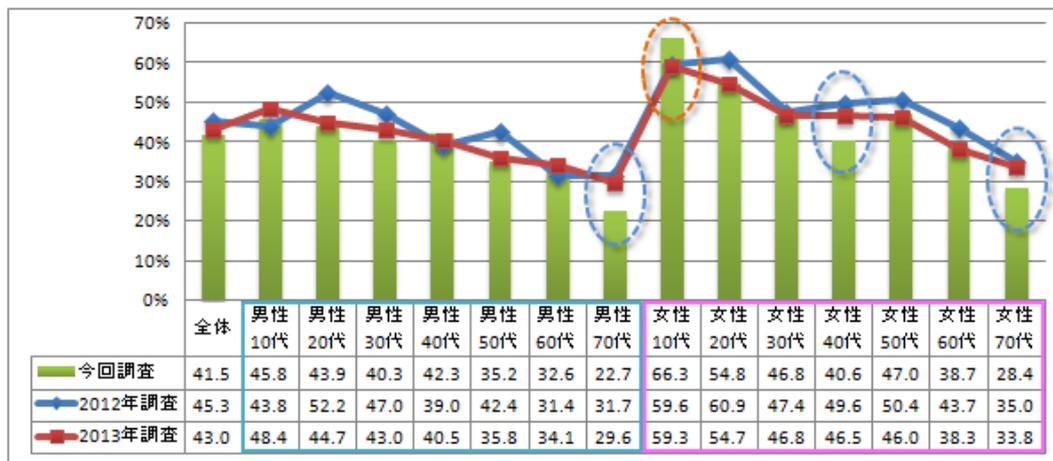
are concerned with attracting the highest number of movie goers in order to reach the maximum amount of ticket sales with no regards to the actual content of the movie. This characteristic of the Japanese market is against vertical integration.

For the final characteristic, when a movie theater does undertake a new activity it goes into direct competition with other theaters. However, cooperation does not need to be necessary amongst the theaters. All theaters are competitors, and there is usually no cooperation that occurs within this market, except amongst third parties. This characteristic of the Japanese market remains neutral, as although direct competition does occur between theaters, there is no cooperation that should occur between the competitors even in a vertically integrated industry.

To recap, the final count for vertical integration of movie production companies and movie theaters, one characteristic of the Japanese market is in favor of vertical integration, one is neither in favor of nor against, and three characteristics are against vertical integration.

3.2.1. Demographic

The fact remains that the main patronage for movie theaters comes from families: the father, mother, and 12-and-under year old child.²³ This is the market that thrives on the family film animated movies, much like *Stand By Me*, *Doraemon*. The age demographic is given in the table below through an annual research done by NTT Japan.



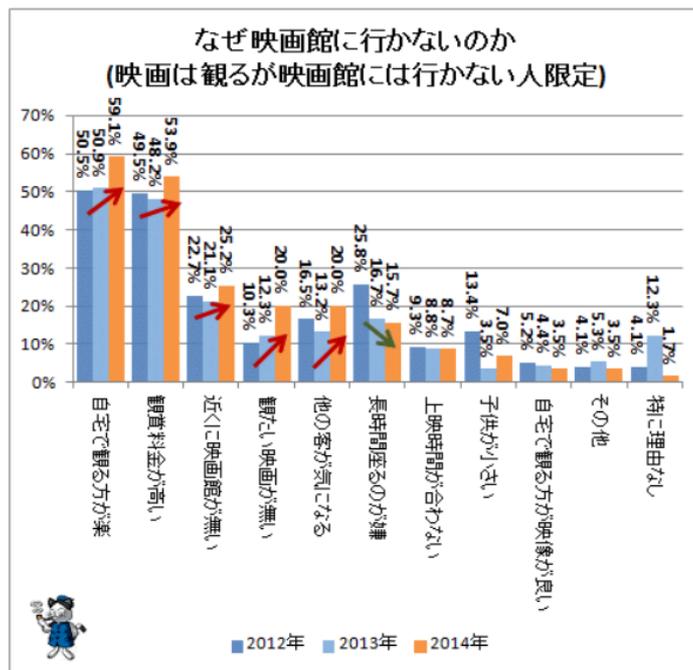
²³ Shilling, Mark. "Looking Japan's film-industry myths in the eye" http://www.japantimes.co.jp/culture/2014/12/03/films/looking-japans-film-industry-myths-eye/#.VXv6ZKOF_sI. Dec. 3, 2014.

3.2.2. A Non-Shifting Market

Unlike the American market, the Japanese market has been much slower in the adoption of streaming media. This holds true for all forms of media in Japan. Here, a comparison can be made with the Japanese music industry. Whereas digital media has taken over the market in Western markets, in Japan, the CD still remains the main form consumption. In fact, more than 80% of sales of music in Japan are still comprised of hard CD sales.²⁴ Although a shift is occurring, it is still much slower than the rest of the world. In terms of music, Line, creators of the popular messaging application, has begun their own streaming music service in hopes of capitalizing on what is essentially an unchallenged market. Even popular music streaming services such as Spotify and Apple Music have yet to tap into the Japanese music due to the strong resistance against streaming.

3.2.3. Reason for a Decreasing Market

The reasons as to why the Japanese market does not go to the movie theater differ to an extent from the American market. While the American market is concerned with the effects caused by others (the number one reason being “people use their cellphones”), the Japanese market is much more concerned with personal surroundings. In a study by



Yahoo! Japan, the dominant reason that people do not enjoy going to movie theaters is “It’s more comfortable to watch at home” with 59.1% stating this as the main reason in the year of 2014.²⁵ The second reason was that “The prices for tickets are too high,” very similar to the US counterparts, at

²⁴ Sisario, Ben. “Music Streaming Service Aims at Japan, Where CD is Still King.” http://www.nytimes.com/2015/06/12/business/media/line-music-a-new-streaming-service-aims-at-japanese-market.html?_r=0. New York Times. June 11, 2015

²⁵ Fuwa, Raizou. “「映画離れ」は「映画そのものの離れ」と「映画館離れ」.” <http://bylines.news.yahoo.co.jp/fuwaraizo/20140309-00033241/>. Yahoo! Japan. March 3rd, 2014

53.9%. Also, a point discussed in Section 2.5.1, the third reason for people not going to movie theaters is there simply is not one near where people live. Movie theater screens are becoming more centralized in metropolitan areas, while cinemas in suburbs close down, limiting the number of people that can access movies. A chart showing the study can be seen above. This chart shows that the uncomfortableness in Japanese movie theaters is increasing throughout the years, with an especially large jump in 2014. There has been a decrease in the complaint that people “do not like to sit for long periods of time,” perhaps because people are simply going to theaters less, meaning that this concern is not a particular concern any longer.

Section 3. CORRELATION WITH GDP AND POPULATION INCOME

3.3.1. US Market

After analyzing the trends listed in the previous sections, I wanted to take a more data-centric approach to the analysis of the industry. Rather than the intrinsic traits of attendees, a monetary analysis would prove more insightful. As such, I collected yearly box office data, and other data related to the country’s general statistics.

First, I took the GDP data for the United States along with the Total Annual Box Office, which is shown below for the period of 2000 – 2014. The data for GDP was taken from the US Bureau of Economic Analysis, while the data for box office was taken from BoxOfficePro.com.

Year	Total Box Office (in the millions)	Annual GDP
2014	\$10,360.60	\$1,741,890.0
2013	\$10,923.60	\$1,676,810.0
2012	\$10,837.40	\$1,616,320.0
2011	\$10,174.30	\$1,551,790.0
2010	\$10,565.60	\$1,496,440.0
2009	\$10,595.50	\$1,471,860.0
2008	\$9,630.70	\$1,447,760.0

2007	\$9,663.80	\$1,441,870.0
2006	\$9,209.50	\$1,385,590.0
2005	\$8,840.50	\$1,309,370.0
2004	\$9,380.50	\$1,227,490.0
2003	\$9,239.70	\$1,151,070.0
2002	\$9,155.00	\$1,097,750.0
2001	\$8,412.50	\$1,062,180.0
2000	\$7,661.00	\$1,028,480.0

By just looking at the data, we can see that as GDP is increasing, the box office earnings also increase. In order to figure out a concrete correlation, I ran a correlation analysis, which can be

viewed on the right. As can be seen, there is a positive, almost perfect correlation between the Total Box

2000–2014	Total Box Office	Annual GDP
Total Box Office	1	
Annual GDP	0.8784492	1

Office earnings, and the Annual GDP. In other words, as the United States goes through times of prosperity, the box office also increases, on the general. Essentially, like with all other luxury goods, as people have more money, they will want to spend more money on going to see movies in movie theaters. There are exceptions throughout the years, however. For example, looking at the years 2013 and 2014, there was a decrease in box office income, but the GDP had increased. But, this is only for

the GDP. In order to see whether the population is more or less correlated with the Box Office, I next looked at the annual average income of the US population. Also, rather than looking at the total box office, I instead looked at the box office earnings per person. In other words, in 2013, movies companies earned \$34.46 for every attendee that went to the movie theaters. However, since data was not available for the year 2014, the data range is only from the year 2000-2013. The data for the annual income of households was taken from the US Social Security Administration. The data can be viewed

Year	Earning Per Person	AWI
2013	\$34.46	\$44,888.16
2012	\$34.40	\$44,321.67
2011	\$32.51	\$42,979.61
2010	\$33.97	\$41,673.83
2009	\$34.40	\$40,711.61
2008	\$31.58	\$41,334.97
2007	\$31.89	\$40,405.48
2006	\$30.60	\$38,651.41
2005	\$29.87	\$36,952.94
2004	\$32.02	\$35,648.55
2003	\$31.86	\$34,064.95
2002	\$31.90	\$33,252.09
2001	\$29.62	\$32,921.92
2000	\$27.26	\$32,154.82

to the right. After collecting this data, I once again ran a correlation analysis to see if the Box Office Earning Per Person (the first column) is related to the Annual Wage Index per household (the right column). The results can be found below.

2000–2013	Earning Per Person	AWI
Earning Per Person	1	
AWI	0.755415678	1

Although there is a correlation, the correlation is less than that of GDP. In general, we can see that as the economy goes through an increase in the United States, more people spend money on movies. However, the Millennial period was characterized with a series of economic instability, which might have brought about influxes. In order to help eliminate these insecurities, I further looked back at to the decade between 1990 and 1999. The raw data for this period can be found to the right.

Year	Total Box Office (in the millions)	Annual GDP (in the millions)
1999	\$7,448.00	\$966,060.0
1998	\$6,949.00	\$908,920.0
1997	\$6,365.90	\$860,850.0
1996	\$5,911.50	\$810,020.0
1995	\$5,493.50	\$766,410.0
1994	\$5,396.20	\$730,880.0
1993	\$5,154.20	\$687,870.0
1992	\$4,871.00	\$653,930.0
1991	\$4,803.20	\$617,400.0
1990	\$5,021.80	\$597,960.0

Looking at just the raw data, we can already see that as the GDP increases throughout the years, so does the total box office. There are little to no influxes, unlike the small spikes and dips that occur in the millennials.

Next, I ran a correlation analysis for the period, and found that the two were almost perfectly related. For the American market,

1990–1999	Total Box Office	Annual GDP
Total Box Office	1	
Annual GDP	0.970099906	1

the movie box office and GDP are positively related, and as GDP fluctuates and changes, so would the box office earnings. This would seem applicable to any culture's movie market, but as we will see in the following section, this does not necessarily hold true.

3.3.2. Japanese Market

I next did the same analysis for the Japanese market, starting with GDP. Unlike the GDP for the US market, the GDP was only given up to the year 2013, and thus, the data used for the box office was also adjusted, and used until the year of 2013. The data can be

Japanese Market		
Year	Total Gross (in millions of yen)	GDP (in millions of yen)
2013	¥194,237	¥48,311,030
2012	¥195,190	¥47,447,490
2011	¥181,197	¥47,390,480

viewed to the right. The correlation here can be less seen than with the US economy, as both the total box office gross and GDP have been fluctuating greatly for the past several years. In order to see this more clearly, I ran a correlation analysis, of which the results can be seen below the data for the Japanese market. Surprisingly, the data had a negative correlation effect. This

2010	¥220,737	¥48,023,250
2009	¥206,035	¥47,393,390
2008	¥194,836	¥48,952,010
2007	¥198,443	¥51,302,330
2006	¥202,934	¥50,910,630
2005	¥198,160	¥50,534,940
2004	¥210,914	¥50,276,080
2003	¥203,259	¥50,188,910
2002	¥196,780	¥49,800,880
2001	¥200,154	¥50,171,060
2000	¥170,862	¥51,083,470

means that the two are not related, and in general, as the GDP of

Japan increases, the total box office gross has in fact decreased to an extent. I wanted to try to

2000–2013	Total Gross (in millions of yen)	GDP (in millions of yen)
Total Gross (in millions of yen)	1	
GDP (in millions of yen)	-0.103229787	1

figure out why this would be. As such, I decided to look at the movies released for the years. I noticed that in years where the box office was smaller, there were more foreign movies released. This may sound reverse logical, considering blockbuster movies tend to draw in larger crowds in Japan, but unlike the American market, where Hollywood blockbusters which rule the box office contribute to GDP, there is a possibility that foreign movies in Japan have profits split, meaning that even if a theater makes a large sum off of a foreign movie, it will not see the complete profits, creating an skew in box office sales. On top of this, there were a number of non-blockbuster movies also released during these years, which earned much less, but at the same time crowded out the movie box office.

Since the GDP has a negative correlation with the Japanese Box Office, what about the annual wage income of the Japanese household? Using the same method as with the US market, I first calculated the amount that the

Year	Earning Per Person	AWI (in millions of yen)
2013	¥1,525	¥3,974,616
2012	¥1,530	¥3,954,871
2011	¥1,417	¥4,051,103

Japanese box office earns off of each person. The data for wages was obtained from The World Economy Register, as published results for AWI through the Japanese government remains both limited and general. The raw data can be viewed to the right. Once again, the fluctuations between the two data makes it not very observable, as there seems to be no stand

2010	¥1,724	¥3,984,041
2009	¥1,609	¥3,971,202
2008	¥1,521	¥4,125,929
2007	¥1,551	¥4,098,315
2006	¥1,587	¥4,159,705
2005	¥1,551	¥4,223,124
2004	¥1,651	¥4,195,691
2003	¥1,593	¥4,229,294
2002	¥1,544	¥4,283,261
2001	¥1,574	¥4,419,656
2000	¥1,347	¥4,487,295

out trend between the two. As such, I ran a correlation analysis, of which the results can be viewed to

the right. Here, we can see that the negative correlation is even greater than the negative correlation between GDP and

2000–2013	Earning Per Person	AWI (in millions of yen)
Earning Per Person	1	
AWI (in millions of yen)	-0.363052263	1

Section 4. IS THE THEATER INDUSTRY ON A DECLINE?

Every year, the box office is increasing, and records are constantly being broken for records such as “Largest Opening Box Office Weekend” or “Highest Grossing Movie.” However, to what extent is the box office increasing when taking away such variables as inflation and population increase. Below are box office data from the year 2000 (data from the year 1960 can be found in the Appendix). The information was gathered from sources such as BoxOfficeMojo, the US Census, and the Motion Picture Association of America. Overlapping information that differed, like average ticket prices, were corrected by taking the average of all overlapping data.

Year	Total Box Office (in the millions)	% Change
2014	\$10,360.60	-5.20%
2013	\$10,923.60	0.80%
2012	\$10,837.40	6.50%
2011	\$10,174.30	-3.70%
2010	\$10,565.60	-0.30%
2009	\$10,595.50	10.00%
2008	\$9,630.70	-0.30%

Year	Total Box Office	% Change
2007	\$9,663.80	4.90%
2006	\$9,209.50	4.20%
2005	\$8,840.50	-5.80%
2004	\$9,380.50	1.50%
2003	\$9,239.70	0.90%
2002	\$9,155.00	8.80%
2001	\$8,412.50	9.80%
2000	\$7,661.00	2.90%

By looking at the information above, we can see the growth has been fluctuating, with some years decreasing, while other years increasing. However, the overall growth has been on a general decline. Despite this, the general box office has been on a rise. A possible explanation for this could be due to the increasing ticket prices, and the rise of 3D and IMAX movies, which are characterized with higher ticket prices.

Next, let us look at some individual comparative data. The data below shows “Earnings Per Screen,” “Earning Per Person,” and “Earning Per Movie.” The data presented here would help to illustrate how profitable the cinema industry actually is based upon specific variables (number of

screens, number of attendees, and number of movies).

Year	Earnings Per Screen	% Change	Earning Per Person	% Change	Earning Per Movie	% Change
2014	\$256,952.95	-5.77%	\$32.38	-6.43%	\$14,843,266.48	-7.12%
2013	\$271,771.91	-2.10%	\$34.46	0.16%	\$15,900,436.68	-2.49%
2012	\$277,483.61	7.36%	\$34.40	5.52%	\$16,296,842.11	-3.71%
2011	\$257,056.59	-4.75%	\$32.51	-4.51%	\$16,900,830.56	-16.63%
2010	\$269,269.59	-0.30%	\$33.97	-1.26%	\$19,711,940.30	-3.17%
2009	\$270,066.02	9.87%	\$34.40	8.21%	\$20,336,852.21	22.11%
2008	\$243,402.33	-2.34%	\$31.58	-1.01%	\$15,839,967.11	3.31%
2007	\$249,105.53	3.76%	\$31.89	4.07%	\$15,315,055.47	1.10%
2006	\$239,737.08	2.29%	\$30.60	2.39%	\$15,147,203.95	-6.70%
2005	\$234,247.48	-9.26%	\$29.87	-7.19%	\$16,161,791.59	-5.34%
2004	\$255,934.19	-0.30%	\$32.02	0.48%	\$17,024,500.91	-7.26%
2003	\$256,693.99	0.48%	\$31.86	-0.12%	\$18,260,276.68	-4.67%
2002	\$255,469.36	10.43%	\$31.90	7.14%	\$19,112,734.86	8.68%
2001	\$228,824.39	10.47%	\$29.62	7.96%	\$17,453,319.50	8.17%
2000	\$204,861.48	2.23%	\$27.26	1.02%	\$16,027,196.65	-0.80%

First, let us focus on the calculations titled “Earnings per Screen.” That data here was calculated by dividing the total box office earnings with the number of total movie screens in the United States. We can see that since the year 2000, the cinema industry has had sales within the \$200,000 range per every actual movie screen in the United States. This growth has fluctuated over the years, with a decline occurring the past two years. 2014 had a greater decrease in earnings per screen when compared to the decrease of the year 2013. Next is the earning per person/movie goer. During the years, movie theaters have earned an average of \$30 per attendee. This would mean that the average American watches about 3 movies per year, correlating with the demographic analysis done in Section 1 of this chapter. Once again, the percent change fluctuates just like the earnings per screen. Most likely, the years with large increases in sales were characterized by large blockbuster movies (ex: 2012 and 2009 had the record setting blockbusters “The Avengers” and “Avatar,” alternatively). The final column, titled “Earnings Per Movie” are much more fluctuated. This column shows the average amount a single movie earned during the respective years. This column shows the average amount a single movie earned during the respective years.

In conclusion, although it would appear that the box office is not generally on a decline, this can actually be misleading due to factors such as increase ticket pricing. Especially looking at the year of 2014 in the table above, there was a large decrease in the total box office across the three different variables. This is illustrated by the average earnings of movies every year. In fact, the box office has been the lowest in 6-years in 2014. The numbers of total box office sales may be skewed due to large blockbusters, which draw in a large number of viewers compared to other movies being released.

CHAPTER 4. STRATEGIC PROPOSAL FOR THE JAPANESE MARKET

Although the American theater industry is making attempts to increase attendance rate in the United States, Japan is still finding itself struggling to bring in more attendees. As such, a few changes need to be made to the Japanese film industry, along with some new strategies that should be taken in order to increase more attendance and to decrease the influxes and risks that are currently hurting the Japanese movie theaters.

The first strategy that the Japanese film industry needs to implement is to break-up their “Trinity.” The link between Production, Distribution, and Exhibition creates an oligopolistic market, which ends up driving up prices and costs. Presently, the vertically integrated Japanese film industry The American market has these industries divided, which has led to a greater competition within the industry, creating a semi-price war which keeps prices low. Aside from creating a price-war between competitors, separating the process would allow movie theaters to focus on individual movie promotions across different production companies in order to draw in greater crowds. Within the current Japanese theater industry, the promotion process for movie theaters takes place within the theater division within the movie company. This creates a stringent ladder of approval that needs to be taken before a marketing strategy can be implemented, which is expected from a vertically integrated company.

The second strategy that the Japanese movie theaters need to take is to renovate their environments. Many Japanese theaters are built within small building complexes, and have been maintained that way since their conception. This not only creates a very cramped environment, but causes the screen to be smaller, therefore reducing the projection system that can be used. Most Japanese theaters still use film projection, while Western movie theaters have moved onto adopting digital projection. I would propose taking out a row of seats in theaters in order to increase the room available. Attendance rates for movie theaters are decreasing, so continuing to maintain these seats would only mean extra costs.

The third strategy I would like to propose may seem a little reverse logical to attracting more people to the theaters. My final strategy instead comes down to increasing movie viewership and

earnings. I propose starting a brand new premium streaming movie service where subscribers will be able to watch movies in the comfort of their own home. Of course, the service will cost a much larger price than it would be to go to a public screening, that way it can be marketed as a platinum luxury. This strategy would especially work if the Japanese movie industry does not dissolve its vertical integration. In the US market, this strategy would create a new market that may take away profit from movie theaters, but in Japan, this would just create a new revenue source due to the vertical integration. This would especially work due to the majority of people not wanting to go to theaters because they would feel more comfortable watching movies at home, as discussed in chapter three, section 1-3.

By following these strategies, Japan can not only increase attendance into theaters, but also increase relations with customers by interacting with them directly, which can also attract important, needed foreign investment. The three strategies listed above all work to decentralize the Japanese film industry in order to make it more translucent. Like other Japanese industries, the cinema industry keeps its cards close to its chest as it competes with a limited number of venders. Since the competition is limited, there is no real reason to reveal all of its information. The three strategies will help to increase competition due to stopping vertical integration, and by increasing a new market with direct streaming services.

CHAPTER 5. CONCLUSION

The movie theater industries in both the United States and Japan have been on a decline over the past few decades. Since the introduction of home television in the 1970s, attendance rate has been on a constant decline. Regardless of cultures, the reasons as to why people are not going to movie theaters remain constant: the costs are too high, and people just want to watch movies on their own times. American movie theaters are attempting to solve this problem by giving users specific reasons to go to movie theaters, like the increase of 3D movies. Along with this, movie companies have been trying to find a way to directly provide their customers with movies, bypassing the movie theaters completely. This has led to the rise of streaming services, and premium services such as PRIMA Cinema. However, the consensus comes down to the only way to truly enjoy a movie is in the movie theater, assuming the customer is not in the upper 1% of income earners.

Unfortunately, Japan has been slower in employing a tactic in order to counter movie attendance rate drops. Japanese box office sales have struggled on since the late 1990s, when the dubbed “cinema golden age” ended. Furthermore, the Japanese movie industry is characterized by a unique business practice, where the production, distribution, and movie theater companies are all consolidated and controlled under a single company. This creates a vertical integration problem within the industry. The US was able to avoid this industry due to legal delegation, but Japan has not experienced such legislation.

Within both markets, we are seeing a general shift in demographics. In the US, the shift is moving towards the younger population, who are gaining more and more burnable income. As such, movies companies are targeting this demographic more, as can be seen by a rise in movies rated PG-13. On the other hand, the Japanese demographic is making a shift towards the older generation, forcing movie companies to adjust their targets towards the 20-34 age range.

My initial hypothesis that movie theater attendance and profitability is directly correlated with a country's economic prosperity held partially true for the American market, but was proved false for the Japanese market. In the US market, there was a near perfect correlation between box office sales, and GDP and household income. However, in Japan, there was a negative correlation. The explanation behind this could be that the Japanese market enjoys foreign movies, which the Japanese movie

industry only receives a limited profit from, and that as the population ages, there are simply less and less people going to movies, resulting in a decreasing market.

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APPENDIX

Table 1: Pre-Release Piracy Effect on Movies
(Source: Ma, Montgomery, Singh, Smith, 2013)

Variable	With Pre-release Piracy		Without Pre-Release Piracy		
	Mean	Standard Deviation	Mean	Standard Deviation	
Box Office (\$million)	52.65	62.58	52.61	63.98	
Budget (\$ million)	46.31	40.74	47.23	40.74	
Opening Screens	1799.00	1071.00	2409.00	938.00	
Director Appeal	0.25	0.44	0.21	0.40	
Star Appeal	0.52	0.50	0.47	0.50	
User Rating	7.00	1.06	6.00	1.31	
Critic Rating	48.83	20.29	38.69	16.95	
Distributor	Warner	0.10	0.30	0.11	0.32
	Universal	0.12	0.32	0.09	0.29
	Paramount	0.12	0.32	0.10	0.31
	Fox	0.10	0.30	0.14	0.35
	Sony	0.10	0.30	0.15	0.36
	New Line	0.02	0.14	0.06	0.24
	Lionsgate	0.06	0.24	0.08	0.27
	MGM	0.08	0.27	0.06	0.23
Rating	G	0.04	0.19	0.04	0.20
	PG-13	0.50	0.50	0.33	0.48
	R	0.35	0.48	0.43	0.50
Genre	Action	0.12	0.32	0.12	0.32
	Comedy	0.17	0.38	0.32	0.47
	Drama	0.40	0.50	0.21	0.40
	Adventure	0.08	0.27	0.05	0.23
	Horror	0.12	0.32	0.12	0.33
	Thriller	0.10	0.30	0.14	0.34
	Animation	0.04	0.19	0.07	0.12
Pirated Quality		7.13	1.53	6.12	1.55
Pre-Release Piracy Indicator		1.00	0.00	0.00	0.00
Pre-Release Piracy Week		7.04	11.07	NA	
Number of Movies		52		481	

Table 2: Decline of Movies w/o Pre-Release Piracy
(Source: Ma, Montgomery, Singh, Smith, 2013)

Parameter	Estimate	Parameter	Estimate
Constant	7.4290 (1.2419)***	Warner	0.2319 (0.1619)
τ	-0.0965 (0.0208)***	Universal	0.4701 (0.1840)*
ρ	-0.4024 (0.1746)*	Paramount	0.2955 (0.1765).
λ	0.7503 (0.0064)***	Fox	0.1793 (0.1562)
Budget	0.3878 (0.0760)***	Sony	0.4489 (0.1632)**
MissingBudget	-0.9032 (0.1253)***	Newline	-0.0329 (0.2168)
Screen	0.4233 (0.0784)***	Lionsgate	0.5159 (0.2187)*
Director Appeal	0.0256 (0.1302)	MGM	-0.5278 (0.2117)*
User Rating	0.1418 (0.0650)*	Action	0.0044 (0.1588)
Critic Rating	-0.0044 (0.0045)	Comedy	0.4414 (0.1432)**
Star Appeal	-0.1451 (0.1104)	Drama	-0.1411 (0.1480)
G	0.6104 (0.2645)*	Adventure	0.3821 (0.2187).
R	-0.7920 (0.1619)***	Horror	0.4361 (0.1800)*
PG13	-0.1962 (0.1404)	Thriller	0.1055 (0.1631)
		Animation	0.0337 (0.2329)
<i>Rate of Decline</i>			
User Rating	-0.0081 (0.0072)	Director Appeal	-0.0615 (0.0147)***
Critic Rating	-0.0069 (0.0005)***	Star Appeal	-0.0687 (0.0126)***

AIC: 6269, BIC: 6484

Standard errors are given in parenthesis. The significance of the estimates are denoted by the following codes: <0.001: '***', <0.01: '**', <0.05: '*' <0.1: '.'

Table 3: Decline of Movies w/ Pre-Release Piracy
(Source: Ma, Montgomery, Singh, Smith, 2013)

Parameter	Estimate	Parameter	Estimate
Constant	7.9259 (3.1922)*	Warner	-0.5336 (0.3554)
τ	-0.1204 (0.0280)***	Universal	0.5473 (0.3542)
ρ	-0.4874 (0.2228)*	Paramount	-0.1750 (0.3372)
λ	0.8232 (0.0264)***	Fox	0.9990 (0.4215)*
Budget	0.3814 (0.1887)*	Sony	0.4926 (0.4726)
MissingBudget	-1.8128 (0.2972)***	Newline	1.1203 (0.5770).
Screen	0.3458 (0.1343)*	Lionsgate	0.1972 (0.7626)
Director Appeal	0.4061 (0.3160)	MGM	-0.8595 (0.4384).
User Rating	0.2665 (0.2456)	Action	0.5540 (0.3265).
Critic Rating	-0.0046 (0.0114)	Comedy	0.5199 (0.3615)
Star Appeal	-0.0560 (0.2471)	Drama	0.2920 (0.3309)
G	-0.4504 (0.8218)	Adventure	0.4485 (0.3964)
R	-0.9812 (0.3496)**	Horror	1.5606 (0.5226)**
PG13	0.0447 (0.3204)	Thriller	0.6404 (0.5393)
		Animation	0.5896 (0.9008)
<i>Rate of Decline</i>			
User Rating	-0.0496 (0.0290).	Director Appeal	-0.0368 (0.0346)
Critic Rating	-0.0077 (0.0014)***	Star Appeal	-0.0730 (0.0294)*

AIC: 1340, BIC: 1496

Standard errors are given in parenthesis. The significance of the estimates are denoted by the following codes: <0.001: '***', <0.01: '**', <0.05: '*' <0.1: '.'

Table 4: Complete List of American Movie Theater Companies
(Listed In Alphabetical Order By City)

CINEMA	CITY		
		Lincoln Square Cinemas	Bellevue
		Bellingham 14	Bellingham
Cinemark North Hills Cinema 6	Ada	Regal Barkley Village 16 IMAX & RPX	Bellingham
Crossgates Stadium 18 with IMAX	Albany	Old Mill Stadium 16	Bend
Century 14 Downtown	Albuquerque	Neshaminy 24	Bensalem
Century Rio 24 Plex	Albuquerque	Music Hall 3	Beverly Hills
Cottonwood 16	Albuquerque	Bloomington Galaxy 14 Cine	Bloomington
Hoffman Center 22	Alexandria	Cinemark Bluffton	Bluffton
Potomac Yards Stadium 16	Alexandria	Cinemark Palace 20	Boca Raton
Aliso Viejo 20	Aliso Viejo	Shadowood 16 Movie Theater	Boca Raton
Cinemark – Allen 16	Allen	Boise Stadium 22 with IMAX	Boise
Altamonte Mall 18	Altamonte	Fenway 13 with RPX	Boston
Grand Teton Stadium 14	Ammon	Century Boulder	Boulder
Downtown Disney District 12	Anaheim	Bowie Crossing 14	Bowie
Tikahtnu Stadium 16	Anchorage		Boynton Beach
Harbour 9	Annapolis	Cinemark Boynton Beach 14	
Cinemark Jess Ranch	Apple Valley	Regency 20	Brandon
Santa Anita 16	Arcadia	Brentwood 14	Brentwood
AMC The Parks At Arlington 18	Arlington	Bryn Mawr Film Institute	Bryn Mawr
Ballston Commons 12	Arlington	AMC Burbank 16	Burbank
Century Aurora	Aurora	AMC Burlington Cinema 10	Burlington
Arbor Cinema @ Great Hills	Austin		Cape Girardeau
Aventura 24	Aventura	Cape West 14 Cine	
	Bainbridge Island	Crossroads Stadium 20	Cary
Bainbridge Cinemas		UltraStar Desert Cinema	Cathedral City
Bakersfield Stadium 14	Bakersfield	Cedar Rapids Galaxy 16 Cine	Cedar Rapids
Regal Cinemas Fairfield Commons Stadium 20 & RPX Movie Theater	Beavercreek	Stonecrest at Piper Glen Stadium 22	Charlotte
Century 16 Cedar Hills	Beaverton	Chesterfield Galaxy 14 Cine	Chesterfield
Cinemark Hill Country Galleria	Bee Cave	Showcase SuperLux	Chestnut Hill

AMC River East 21	Chicago
City North 14 Cinema	Chicago
ShowPlace ICON at Roosevelt Collection	Chicago
Webster Place 11	Chicago
Cinemark Chico	Chico
Otay Ranch 12	Chula Vista
Oakley Station	Cincinnati
Puente Hills 20	City Of Industry
Claremont 5	Claremont
Severance Stadium 14	Cleveland Heights
Clifton Commons 16	Clifton
Riverstone Stadium 14	Coeur d' Alene
CINEMARK MOVIES 18 AND XD	College Station
Interquest Stadium 14	Colorado Springs
Tinseltown with XD	Colorado Springs
Columbia Mall 14	Columbia
Snowden Square 14	Columbia
Gateway Film Center	Columbus
Polaris 18	Columbus
AMC Concord Mills 24	Concord
Century 16	Corpus Christi
Covington Stadium 14	Covington
Cupertino Square 16	Cupertino
AMC Northpark 15	Dallas
Cinemark 17	Dallas
Galaxy Theatre	Dallas
Century 20 Daly City	Daly City
AMC Loews Danbury 16	Danbury
The Palace Danbury	Danbury

Davenport 18	Davenport
Cinemark Paradise 24	Davie
Dayton South 16	Dayton
Deer Park 16	Deer Park
Cinemark 14	Denton
Pavilions 15	Denver
Des Peres 14 Cine	Des Peres
Destin Commons 14	Destin
Arbor Place Mall 18 with IMAX	Douglasville
Hacienda Crossings 21 with IMAX	Dublin
East Hanover 12	East Hanover
Eden Prairie Mall 18	Eden Prairie
Edwardsville 12	Edwardsville
El Dorado Hills Stadium 13	El Dorado Hills
Century Laguna 16	Elk Grove
Bay Street 16	Emeryville
Town Center 5	Encino
Tinseltown USA - Erie	Erie
Coconut Point Stadium 16	Esteros
Evanston 18 / CineArts 6	Evanston
Fairfax Towne Center 10	Fairfax
Fairfield Cinemas at Bullard Square	Fairfield
Fairfield Stadium 16	Fairfield
CINEMARK TINSELTON 17	Fayetteville
Century Federal Way	Federal Way
Flint West 14	Flint
Cinemark Fort Collins	Fort Collins
Belltower 20	Fort Myers
Fossil Creek	Fort Worth
AMC Framingham Premium Cinema	Framingham
Fredericksburg 14	Fredericksburg
Fresno Stadium 21 plus IMAX	Fresno

Cinemark Frisco Square	Frisco
Gainesville Cinema 14	Gainesville
Arrowhead 14	Glendale
AMC Glendora 12 @ 210/57	Glendora
Celebration! North & IMAX	Grand Rapids
Celebration! RiverTown	Grandville
Tinseltown Movies 17	Grapevine
Hollywood 20 Greenville with RPX	Greenville
Cinemark	Gulfport
Hampshire Mall 15	Hadley
Hamilton 24	Hamilton
Hampton Towne Centre 24	Hampton
Cinemark Egyptian 24	Hanover
Elmwood Palace 20	Harahan
Cinemark	Harlingen
Susquehanna 14 Harrisburg	Harrisburg
Cinema City at the Palace	Hartford
Hastings Museum	Hastings
All Westchester Saw Mill Multiplex	Hawthorne
Hazlet 12	Hazlet
Alice C. Wiltsie Performing Arts Center at the Historic Castle	Hazleton
St. Louis Mills 18	Hazlewood
Broadway Multiplex Cinemas	Hicksville
AMC Highland Village 12	Highland Village
Highlands Playhouse	Highlands
AMC Highlands Ranch 24	Highlands Ranch
Peerless Theatre	Holyoke
Dole Cannery 18 with IMAX	Honolulu
AMC Gulf Pointe 30	Houston
Cinemark Memorial City	Houston

Edwards Houston Marq' E Stadium 23 & IMAX	Houston
AMC Deerbrook 24	Humble
Huntington Beach	Huntington Beach
AMC Castleton Square 14	Indianapolis
AMC Showplace Indianapolis 17	Indianapolis
Irvine Spectrum 20	Irvine
AMC Regency 24	Jacksonville
Avenues Stadium 20	Jacksonville
Tinseltown USA - Jacksonville	Jacksonville
Treasure Coast Mall Stadium 16 Movie Theater	Jensen Beach
Maui Mall Megaplex Cinema	Kahului
AMC BarryWoods 24	Kansas City
Tivoli Cinemas	Kansas City
King of Prussia 16 with IMAX	King of Prussia
Independence Mall 14	Kington
La Jolla 12	La Jolla
Martin Village Stadium 16	Lacey
Downtown Disney 24	Lake Buena Vista
Cinemark 14	Lake Charles
Eagles' Landing 8 Cine	Lake Ozark
Movies of Lake Worth 6	Lake Worth
Century 16 Bel Mar	Lakewood
Colorado Mills Stadium 16	Lakewood
Long Beach 26	Lakewood
Cinemark 22	Lancaster
Ware Center	Lancaster
Celebration Cinema Lansing with IMAX	Lansing
Fox Theater 6	Laramie
Lark Theater	Larkspur

Century 18 Sam's Town	Las Vegas
Century Orleans	Las Vegas
Cinemark Century 16 South Point and XD	Las Vegas
Santa Fe Station 16	Las Vegas
Village Square 18	Las Vegas
AMC Town Center 20	Leawood
Lincolnshire 21	Lincolnshire
AMC Century City 15	Los Angeles
Baldwin Hills Crenshaw Plaza 15	Los Angeles
Rave 18	Los Angeles
REGAL CINEMAS LA LIVE STADIUM 14	Los Angeles
Preston Crossing 16	Louisville
Tinseltown Louisville	Louisville
Movies 16	Lubbock
Alderwood 7	Lynnwood
Buckland Hills 18	Manchester
Showplace Manteca 16	Manteca
Ak-Chin 12	Maricopa
Solomon Pond Mall 15	Marlborough
Deerfield Towne Center Stadium 16	Mason
Movies 17	McAllen
McDonough Stadium 16	McDonough
Tyson's Corner 16	McLean
Tinseltown	Medford
Cinemark 16	Mesa
Mesa Grand 24	Mesa
AMC Mesquite 30	Mesquite
South Beach Stadium 18	Miami Beach
Town Hall Theater	Middlebury
Regal Cinemas Westchester Commons Stadium 16 Movie	Midlothian

Theater	
Century 16 Union Heights	Midvale
Connecticut Post 14	Milford
Milford 16	Milford
Century 20 Great Mall	Milpitas
Movies 14	Mishawaka
Monterey 13	Monterey
Cinemark 20 Moosic and XD	Moosic
Morgantown Stadium 12	Morgantown
AMC Southlake 24	Morrow
Century Cinema 16	Mountain View
Cinemark 14	Myrtle Beach
AMC Showplace Naperville 16	Naperville
Regal Hollywood Stadium 20 - Naples	Naples
Green Hills 16	Nashville
Opry Mills 20	Nashville
Criterion Cinemas 7	New Haven
New Roc Stadium 18	New Rochelle
Empire 25	New York
Union Square Stadium 14	New York
Fox Run Stadium 15 RPX Movie Theater	Newington
AMC Newport On The Levee 20	Newport
Tinseltown USA - North Canton	North Canton
Charlestowne Square 18	North Charleston
NoHo 7	North Hollywood
AMC Barrett Commons 24	NW Kennesaw
O'Fallon 15 Cine	O'Fallon
Marketplace 24	Oaks
Sunflower Cinema	Oberlin

Hollywood Stadium 16	Ocala
Quail Springs 24	Oklahoma City
Tinseltown USA - Oklahoma City	Oklahoma City
AMC Studio 30 Olathe	Olathe
AMC Woodland Square 20	Oldsmar
Capital Mall	Olympia
Oakview Plaza 24	Omaha
Cinemark 14	Ontario
Ontario Mills 30	Ontario
Century Stadium 25	Orange
Orange 30	Orange
AMC Orange Park 24	Orange Park
Cinemark Festival Bay Mall	Orlando
Pointe Orlando 21	Orlando
Waterford Lakes Stadium 20	Orlando
Century River Park 16	Oxnard
Garden State 16	Paramus
Playhouse 7	Pasadena
Stonington 10	Pawcatuck
Peoria Riverfront Museum	Peona
Tinseltown USA - Pflugerville	Pflugerville
Movies 8	Pharr
Ahwatukee 24	Phoenix
Desert Ridge 18	Phoenix
Park Place Stadium 16	Pinellas Park
Cinemark Robinson Township	Pittsburgh
Cinemark (The Legacy)	Plano
Cinemark West Plano	Plano
Century 16 Downtown	Pleasant Hill
Plymouth Meeting Mall 12	Plymouth Meeting
Town Center Stadium 16 - Port Charlotte	Port Charlotte
Pavilion Stadium 14	Port Orange

Port Washington Cinemas	Port Washington
Celebration! Crossroads	Portage
Century Clackamas Town Center	Portland
Lloyd Center 10	Portland
Providence Place Cinemas 16	Providence
Tinseltown Pueblo	Pueblo
Century Theatres at The River	Rancho Mirage
Cinemark Redding 14	Redding
Bella Botega 11	Redmond
Redwood Downtown 20	Redwood City
Century Riverside 12	Reno
Century Summit Sierra	Reno
Reston Town Center 11	Reston
Movieland at Boulevard Square	Richmond
Tyler Galleria 16	Riverside
Cinemark Tinseltown USA and IMAX	Rochester
Rochester Galaxy 14	Rochester
Rockaway 16	Rockaway
Century Roseville 14	Roseville
Rosedale 14	Roseville
Royal Palm Stadium 18 with RPX	Royal Palm Beach
Century 16 Greenback Lane	Sacramento
Downtown Plaza	Sacramento
Natomas Marketplace	Sacramento
Fox Theater Salinas	Salinas
Century 16	Salt Lake City
Huebner Oaks Stadium 14 & RPX	San Antonio
Cinemark At Tanforan	San Bruno
Horton Plaza 8	San Diego
Mira Mesa 18	San Diego

Mission Valley – Hazard Center	San Diego
Century 9 San Francisco Centre	San Francisco
San Marcos 18	San Marcos
Century 12 San Mateo	San Mateo
Century Regency	San Rafael
Valencia Stadium 12	Santa Clarita
Santa Cruz 9	Santa Cruz
Regal Hollywood Stadium 20	Sarasota
Sarasota 12	Sarasota
Criterion Cinemas Saratoga	Saratoga
AMC Showplace Schererville 16	Schererville
UltraLuxe Scottsdale Pavilions	Scottsdale
Thornton Place Stadium 14 IMAX	Seattle
Mary D. Fisher Theatre	Sedona
Tinseltown Shreveport	Shreveport
Cinemark 16	Somerdale
AMC South Barrington 30	South Barrington
Merrill Palace 9	South Burlington
South Hadley' s Tower Theaters	South Hadley
Sunset Place 24	South Miami
South Orange 5	South Orange
AMC First Colony 24	South Sugar Land
Campbell 16 Cine	Springfield
Cinemark	Springfield
Ronnies 20 Cine	St. Louis
ShowPlace ICON at The West End	St. Louis Park

Mid Rivers 14 Cine	St. Peters
AMC Forum 30	Sterling Heights
Stony Brook 17	Stony Brook
Cinemark Stroudsburg	Stroudsburg
Sawgrass Stadium 23	Sunrise
Regal Destiny Stadium 19 IMAX & RPX Movie Theater	Syracuse
Citrus Stadium Park Mall 20	Tampa
Cinemark 18 @ Pittsburgh Mills Mall	Tarentum
Edwards Temecula Stadium 15	Temecula
Cinemark at Market Street	The Woodlands
Franklin Park 16	Toledo
Seacourt 10	Toms River
AMC Del Amo 18	Torrance
Rolling Hills 20	Torrance
Cinemark Towson Mall	Towson
Century El Con 20	Tucson
Park Place 20 with XD	Tucson
Southcenter 16	Tukwila
Tennessee Valley Museum of Art	Tuscumbia
Tustin 14 @ The District	Tustin
Century 25 Union Landing	Union City
Universal Citywalk Stadium 19	Universal City
Cinemark 12 @ Valparaiso Commons	Valparaiso
Victoria Mall	Victoria
Lynnhaven 18	Virginia Beach
Walnut Creek 14	Walnut Creek
Cantera 17	Warrenville
Warrington Crossing 22	Warrington
Mazza Gallerie	Washington

Wayne 14	Wayne
Cinemark Webster	Webster
Webster 12	Webster
Royal Theatre	West LA
West Springfield 15	West Springfield
Westbury Stadium 12	Westbury
Crocker Park Stadium 16	Westlake Village
AMC Orchard 12	Westminster
AMC Westminster Promenade 24	Westminster
College Point Multiplex Cinemas	Whitestone
Cinemark 14 Wichita Falls	Wichita Falls
REGAL TRANSIT CENTER STADIUM 18 & IMAX	Williamsville
Brandywine Town Center 16	Wilmington
Mayfaire Stadium 16	Wilmington
Winter Park Stadium 20	Winter Park
Showcase Cinemas Woburn	Woburn
AMC Promenade 16	Woodland Hills
Showcase Cinemas Worcester North	Worcester
Showcase Cinema de Lux Ridge Hill	Yonkers
Ann Arbor 20	Ypsilanti
Cinemark Yuba City	Yuba City

Table 5: Complete List of Japanese Movie Theater Companies
(Organized in Japanese Character Order)

アスミック・エース株式会社 (Asmik Ace)	東宝株式会社 (Toho)
ウォルト・ディズニー・ジャパン株式会社 (Walt Disney Japan)	東宝東和株式会社 (Toho-Towa)
エイベックス・ピクチャーズ株式会社 (Avex Pictures)	株式会社東北新社 (TFC)
株式会社エスピーオー (Espeo)	20 世紀フォックス映画 (20 th Century Fox)
株式会社 KADOKAWA (Kadokawa)	日活株式会社 (Nikkatu)
カルチャヴィル合同会社 (Culture-ville)	ニューセレクト株式会社 (New Select)
カルチュア・エンタテインメント株式会社 (Culture Entertainment)	株式会社ハピネット (Happinet)
株式会社キノフィルムズ (Kino Films)	パラマウント・ジャパン合同会社 (Paramount Japan)
ギャガ株式会社 (GaGa)	株式会社ファントム・フィルム (Phantom Film)
株式会社クロックワークス (Klock Works)	株式会社プレシディオ (Presidio)
株式会社ショウゲート (Showgate)	ブロードメディア・スタジオ株式会社 (Broad Media Studio)
松竹株式会社 (Shochiku)	株式会社ポニーキャニオン (Pony Canyon)
株式会社ソニー・ピクチャーズ エンタテインメント (Sony Pictures Entertainment)	有限会社ロングライド (Long Light)
東映株式会社 (Toei)	株式会社WOWOW (WOWOW)
東京テアトル株式会社 (Tokyo Theatre)	ワーナー エンターテイメント ジャパン株式 会社 (Warner Brothers Entertainment)

Table 6: General Data on US Box Office (1960 – 1940)

Year	Total Box Office (in the millions)	% Change	Tickets Sold	% Change	# of Movies	Total Screens	Avg Ticket Price	Population Size (in the millions)
2014	\$10,360.60	-5.20%	1,268.10	-5.60%	698	40321	\$8.17	320
2013	\$10,923.60	0.80%	1,343.60	-1.30%	687	40194	\$8.13	317
2012	\$10,837.40	6.50%	1,361.50	6.10%	665	39056	\$7.96	315
2011	\$10,174.30	-3.70%	1,283.00	-4.20%	602	39580	\$7.93	313
2010	\$10,565.60	-0.30%	1,339.10	-5.20%	536	39238	\$7.89	311
2009	\$10,595.50	10.00%	1,412.70	5.30%	521	39233	\$7.50	308
2008	\$9,630.70	-0.30%	1,341.30	-4.50%	608	39567	\$7.18	305
2007	\$9,663.80	4.90%	1,404.60	-0.10%	631	38794	\$6.88	303
2006	\$9,209.50	4.20%	1,406.00	2.00%	608	38415	\$6.55	301
2005	\$8,840.50	-5.80%	1,379.20	-8.70%	547	37740	\$6.41	296
2004	\$9,380.50	1.50%	1,510.50	-1.40%	551	36652	\$6.21	293
2003	\$9,239.70	0.90%	1,532.30	-2.80%	506	35995	\$6.03	290
2002	\$9,155.00	8.80%	1,575.70	6.00%	479	35,836	\$5.81	287
2001	\$8,412.50	9.80%	1,487.30	4.70%	482	36,764	\$5.66	284
2000	\$7,661.00	2.90%	1,420.80	-3.00%	478	37,396	\$5.39	281
1999	\$7,448.00	7.20%	1,465.20	-1.10%	461	37,185	\$5.08	276
1998	\$6,949.00	9.20%	1,480.70	6.70%	509	34,186	\$4.69	273
1997	\$6,365.90	7.70%	1,387.70	3.70%	510	31,640	\$4.59	270
1996	\$5,911.50	7.60%	1,338.60	6.00%	471	29,690	\$4.42	267

1995	\$5,493.50	1.80%	1,262.60	-2.30%	411	27,805	\$4.35	264
1994	\$5,396.20	4.70%	1,291.70	3.80%	453	26,586	\$4.18	261
1993	\$5,154.20	5.80%	1,244.00	6.00%	462	25,737	\$4.14	258
1992	\$4,871.00	1.40%	1,173.20	2.90%	480	25,105	\$4.15	255
1991	\$4,803.20	-4.40%	1,140.60	-4.00%	458	24,570	\$4.21	252
1990	\$5,021.80	-0.20%	1,188.60	-5.90%	410	23,689	\$4.23	249
1989	\$5,033.40	12.90%	1,262.80	16.40%	502	23,132	\$3.97	247
1988	\$4,458.40	4.80%	1,084.80	-0.30%	510	23,234	\$4.11	244
1987	\$4,252.90	12.60%	1,088.50	7.00%	509	23,555	\$3.91	242
1986	\$3,778.00	0.80%	1,017.20	-3.70%	451	22,765	\$3.71	240
1985	\$3,749.20	-7.00%	1,056.10	-11.90%	470	21,147	\$3.55	238
1984	\$4,031.00	7.00%	1,199.00	0.20%	536	20,200	\$3.36	236
1983	\$3,766.00	9.10%	1,197.00	1.90%	495	18,884	\$3.15	234
1982	\$3,453.00	16.40%	1,175.00	10.10%	428	18,020	\$2.94	232
1981	\$2,966.00	7.90%	1,067.00	4.40%	173	18,040	\$2.78	229
1980	\$2,749.00	-2.07%	1,022.00	-0.09386	161	17,590	\$2.69	227
1979	\$2,806.00	5.45%	1117.93	-0.01416	214	16,900	\$2.51	225
1978	\$2,653.00	10.59%	1133.76	0.061815	354	16,250	\$2.34	223
1977	\$2,372.00	14.17%	1063.68	0.101355	560	16,050	\$2.23	220
1976	\$2,036.00	-3.88%	955.87	-0.07934	575	15,800	\$2.13	218
1975	\$2,115.00	9.74%	1031.71	0.010518	604	15,000	\$2.05	216
1974	\$1,909.00	20.17%	1020.86	0.156573	550	14,400	\$1.87	214

1973	\$1,524.00	-7.87%	861.02	-0.12316	463	14,400	\$1.77	212
1972	\$1,644.00	28.83%	967.06	0.266755	376	14,400	\$1.70	210
1971	\$1,170.00	0.68%	709.09	-0.05724	432	14,000	\$1.65	208
1970	\$1,162.00	5.42%	749.68	-0.03237	367	13,750	\$1.55	205
1969	\$1,099.00	4.91%	773.94	-0.03071	412	13,500	\$1.42	203
1968	\$1,045.00	5.36%	797.71	-0.02463	454	13,120	\$1.31	201
1967	\$989.00	2.53%	817.36	-0.07219	462	13,490	\$1.21	199
1966	\$964.00	3.84%	876.36	-0.03704	451	14,350	\$1.10	197
1965	\$927.00	1.51%	908.82	-0.06872	452	14,000	1.02	194
1964	\$913.00	0.99%	971.28	-0.09498	502	13,750	\$0.94	192
1963	\$904.00	0.11%	1063.53	-0.13208	420	12,800	\$0.85	189
1962	\$903.00	-1.99%	1204.00	-0.03372	472	21,000	\$0.75	187
1961	\$921.00	-3.26%	1244.59	-0.1074	462	21,000	\$0.74	184
1960	\$951.00	--	1378.26	--	387	16,999	\$0.69	181

Table 7: General Data on Japanese Box Office (1960-2014)

*Note: Population Size Information Unavailable For Years Prior 1980

Year	Total Gross (in millions of yen)	% Change	Avg # of Movies	% Change	Avg. Ticket Price	% Change	Number of Screens	% Change	Population Size (in millions)
2014	¥207,034	6.18%	1184	5.66%	¥1,285	3.04%	3364	1.37%	127.06
2013	¥194,237	-0.49%	1117	12.00%	¥1,246	-0.96%	3318	0.84%	127.34
2012	¥195,190	7.17%	983	18.72%	¥1,258	0.48%	3290	-1.49%	127.61
2011	¥181,197	-21.82%	799	10.39%	¥1,252	-1.12%	3339	-2.19%	127.9
2010	¥220,737	6.66%	716	-6.42%	¥1,266	3.87%	3412	0.47%	128.05
2009	¥206,035	5.44%	762	-5.77%	¥1,217	0.25%	3396	1.09%	128.05
2008	¥194,836	-1.85%	806	-0.50%	¥1,214	-0.16%	3359	4.11%	128.07
2007	¥198,443	-2.26%	810	-1.36%	¥1,216	-1.40%	3221	4.91%	127.98
2006	¥202,934	2.35%	821	10.96%	¥1,233	-0.16%	3063	4.47%	127.85
2005	¥198,160	-6.44%	731	11.22%	¥1,235	-0.40%	2926	3.45%	127.78
2004	¥210,914	3.63%	649	4.16%	¥1,240	-0.97%	2825	5.10%	127.75
2003	¥203,259	3.19%	622	-2.89%	¥1,252	2.24%	2681	1.72%	127.62
2002	¥196,780	-1.71%	640	1.56%	¥1,224	-0.16%	2635	1.90%	127.42
2001	¥200,154	14.63%	630	-2.22%	¥1,226	-2.94%	2585	2.36%	127.17
2000	¥170,862	51.54%	644	11.80%	¥1,262	-0.08%	2524	12.00%	126.83
1999	¥82,794	-5.51%	568	2.29%	¥1,263	-0.08%	2221	10.27%	126.59
1998	¥87,360	10.12%	555	-10.09%	¥1,264	0.40%	1993	5.47%	126.35
1997	¥78,522	19.34%	611	2.13%	¥1,259	1.11%	1884	2.97%	126.05

1996	¥63,338	-8.11%	598	-2.01%	¥1,245	0.16%	1828	2.84%	125.75
1995	¥68,473	6.31%	610	9.34%	¥1,243	-0.48%	1776	1.01%	125.46
1994	¥64,152	-11.94%	553	-6.69%	¥1,249	-0.24%	1758	1.37%	125.14
1993	¥71,811	13.16%	590	-4.58%	¥1,252	3.35%	1734	-0.58%	124.8
1992	¥62,361	-6.69%	617	-12.97%	¥1,210	2.40%	1744	-3.44%	124.39
1991	¥66,534	-6.84%	697	-1.00%	¥1,181	0.34%	1804	-1.77%	123.92
1990	¥71,082	5.52%	704	-10.37%	¥1,177	1.36%	1836	-4.14%	123.46
1989	¥67,155	2.43%	777	3.47%	¥1,161	3.70%	1912	-4.86%	123.03
1988	¥65,525	2.73%	750	15.07%	¥1,118	-0.18%	2005	-2.39%	122.56
1987	¥63,736	-13.96%	637	5.81%	¥1,120	0.36%	2053	-2.73%	122.02
1986	¥72,636	4.49%	600	2.83%	¥1,116	-0.18%	2109	-1.33%	121.43
1985	¥69,375	1.69%	583	3.09%	¥1,118	-2.33%	2137	-2.53%	120.77
1984	¥68,205	-15.49%	565	11.86%	¥1,144	4.46%	2191	-2.19%	120.02
1983	¥78,773	17.14%	498	-4.42%	¥1,093	0.09%	2239	-1.25%	119.23
1982	¥65,268	5.28%	520	-6.73%	¥1,092	-0.09%	2267	-1.37%	118.42
1981	¥61,820	-2.64%	555	4.68%	¥1,093	7.69%	2298	-2.87%	117.59
1980	¥63,454	2.90%	529	0.38%	¥1,009	5.05%	2364	-0.42%	116.72
1979	¥61,613	-7.30%	527	4.17%	¥958	-0.94%	2374	-0.76%	
1978	¥66,113	8.08%	505	-10.50%	¥967	4.55%	2392	-1.17%	
1977	¥60,769	6.52%	558	-7.71%	¥923	7.69%	2420	-1.36%	
1976	¥56,807	9.28%	601	7.15%	¥852	11.85%	2453	0.41%	
1975	¥51,536	13.68%	558	-4.84%	¥751	15.98%	2443	-1.02%	

1974	¥44,484	20.84%	585	-12.31%	¥631	20.76%	2468	-2.51%
1973	¥35,212	18.44%	657	-3.96%	¥500	17.80%	2530	-5.65%
1972	¥28,719	-5.90%	683	2.78%	¥411	10.95%	2673	-11.26%
1971	¥30,413	-2.30%	664	0.75%	¥366	11.48%	2974	-9.15%
1970	¥31,112	-7.43%	659	-13.35%	¥324	8.95%	3246	-10.97%
1969	¥33,423	1.38%	747	0.54%	¥295	11.19%	3602	-5.89%
1968	¥32,963	1.97%	743	12.65%	¥262	9.92%	3814	-8.00%
1967	¥32,312	0.99%	649	-6.63%	¥236	7.20%	4119	-4.30%
1966	¥31,992	-5.52%	692	-8.53%	¥219	7.31%	4296	-8.22%
1965	¥33,758	-1.68%	751	59.25%	¥203	12.32%	4649	-5.98%
1964	¥34,324	89.47%	306	-103.92%	¥178	14.61%	4927	-15.61%
1963	¥3,615	-953.83%	624	3.37%	¥152	24.34%	5696	-18.36%
1962	¥38,096	-2.03%	603	-26.70%	¥115	26.09%	6742	-7.25%
1961	¥38,869	-922.21%	764	0.13%	¥85	15.29%	7231	-3.13%
1960	¥397,321	100.00%	763	100.00%	¥72	100.00%	7457	100.00%