ISSN 2821-9074 (Online) ISSN 2730-2601 (Print)

RICE Journal of Creative Entrepreneurship and Management, Vol. 4, No.1, pp. 48-64,

January-April 2023

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doi: 10.14456/rjcm.2023.4

Received 30.01.23/ Revised 1.04.23/ Accepted 11.04.23

The Analysis of Cinemas in China after the End of COVID-19

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Abstract

The COVID-19 pandemic has severely impacted the worldwide film industry and related businesses. This year, mainstream movie theaters in every major country have been closed for months due to the economic downturn. This has resulted in the layoff of thousands of film industry workers and the suspension of production on dozens of upcoming films. The film industry around the world is currently experiencing a decline in revenue. Still, the film industry in China, in contrast to the U.S., has been performing exceptionally well and is showing no signs of slowing down. Movie theaters in China have recovered revenue since the COVID-19 pandemic was quickly controlled. With the implementation of new health and safety regulations, theaters around the world have begun reopening. Employees temporarily laid off can now return to their jobs, and many new ones have opened up since the lockdown was lifted. As the number of confirmed coronavirus cases in the United States continued to rise, movie theaters across the region were forced to cancel showings and keep their doors closed out of fear of spreading the virus. This paper reports how China has now surpassed the United States as the world's biggest box office, suggesting that the Chinese film industry is among the first to recover from the spread of COVID-19. The pandemic is not likely to discourage moviegoing, but it could significantly alter the cinematic experience.

Keywords: Film industry in China, post-COVID-19, cinemas, Chinese's box office

1. Introduction

The outbreak of the new coronavirus COVID-19 was called a global pandemic by the World Health Organization on January 31, 2020 (Beijing time) (Liu et al., 2020). This is not the first time in history that such a statement has been made. It has happened five times before. But the size and spread of the outbreak, along with the fear and anxiety of the people, have become a deadly mix (Mirza et al., 2020). This has led to financial and economic effects that were not expected, despite the lower death rate (Fu & Shen, 2020; Guan et al., 2020). Everyone's life has been changed in some way by these effects, which is why it has been called a global health emergency (Liu et al., 2020; Rizvi et al., 2020). People think the spread of the COVID-19 virus differs from the spread of other viruses that

plagued the world in the past (Reinhart, 2020). Viruses like Zika and Ebola popped up and were mostly found in certain parts of the world as having effects on economies worldwide (Baker et al., 2020). In the case of COVID-19, its outbreak was reported from Wuhan in Hubei Province, China.

Wuhan is one of the most important transportation hubs, and many people are always moving through it (Chakraborty & Maity, 2020). This pandemic started during an annual spring festival, during which the world's largest human migration occurs through this hub, making it worse. This is how the COVID-19 virus spread worldwide and caused a global outbreak. COVID-19 is one of the most infectious and contagious diseases in the world. Panic and confusion among people and institutions, along with the spread of COVID-19, have caused a lot of volatility and problems in several industries (Haroon & Rizvi, 2020). In this case, the Chinese government has already taken several steps and measures to stop the spread of the virus and the disease from worsening (Ashraf, 2020). For example, the immediate lockdown policy has been put into place globally. This means that all business activities have stopped, and people's movement has been limited or even stopped in some places. Also, people can't go from one place to another as easily as they used to, either within their own or in other countries (Ding et al., 2020). People were more confused because of these lockdowns, which made them rush to buy food and household supplies. This increased the gap between the demand for and supply of goods and services. In addition, the local governments of wealthy countries have announced several economical packages to help and compensate the people with food and other things they need to live on. These packages have helped the local people with food and other necessities to live during the pandemic. But putting these measures into place has lowered the level of economic production worldwide and caused a deficit, which can also be called "economic distancing." This is a situation in which many people have lost their jobs, and the incomes of millions of people worldwide have gone down (Park et al., 2020).

In the same context, Ashraf (2020) classified the government's actions to stop the outbreak into three main groups. In the first group, things were done to keep people apart, like closing parks, schools, and public transportation, encouraging people to work from home or with a small staff, and making it harder to eat in restaurants. In the second group, public awareness and containment measures were used to make people aware of the disease and keep it from spreading. People who were tested positive for COVID were put in quarantine. The third group was the government's financial aid programs, which included giving cash to poor households and families, lowering loan and debt payments, and lowering utility bills (Hepburn et al., 2020). Stock markets, which are seen as the place where smart, opinionated, and sane investors do business, have also had different returns on the actions taken by governments all over the world (Yarovaya et al., 2020). For example, social distancing measures could hurt the return because there haven't been many activities that bring in money or make the economy grow. On the other hand, government aid and income packages could lead to positive returns and boost investors' confidence in the market. So, the direct effects of these measures could be bad, but they are only temporary, so eventually, things should get back to normal, and operations should go on as usual. So, in a roundabout way, these steps help investors hold on to the hope that things will eventually return to how they were before.

The entertainment business has been hardly hit for its vulnerability and higher risk in human contacts than any other business during the pandemic (Hu et al., 2019; Gu et al., 2020). The closing of movie theaters stopped the flow of income from newly released movies, and the production of movies on the floor and the sets were not possible because the government did not allow people's gathering. Even though people spent more time watching TV and movies at home during the lockdown offered by media and entertainment agencies (Haroon & Rizvi, 2020), this did not generate income at the level of former activities before the lockdown. The new projects have been put on hold, there has been a decrease in employment, which has hurt those in the movie and entertainment business. These are negative effects on the economy on the stock markets and returns of the film and drama industry (FDI) (Hu et al., 2009). In short, investing in FDI became a waste of time for closure of movie theaters and other physical forms of entertainment, and there was a shift toward online entertainment platforms worldwide. These platforms give people easy access to entertainment content through the internet. However, many people have still longed for going to the movie theaters but needed to turn to online platforms in support of end users with easy access and reduced costs of distributing, screening, and creating new contents. FDI has been saved by online platforms during the COVID-19 pandemic. But this phenomenon still doesn't fully explain why this industry has so much untapped potential.

China with more than 1.3 billion people is one of the biggest markets for movies and TV shows. According to Statista (2021), China made 1,037 movies in 2019. Also, there are more than 50 chains of movie theaters in China run by different companies. Only "Guangdong Dadi Digital Cinemas" is said to have more than 1,120 movie screens. The total number of movie theater screens is more than 75,000, and there are about 11,300 movie theaters. Also, and this is the most important thing, the country has the biggest market based on the amount of money made at the box office, which was over USD 3 billion in 2020 alone. So, according to the goals set, the researchers would like to see more research into the size and nature of the relationship between FDI and COVID-19, especially in the case of China, which has one of the largest FDI industries in the world. Also, this should be done because China has the largest consumer base and has become a market for international companies to come and sell their goods.

2. Research Objectives

There were three objectives in this study:

- 1. To identify the extent of the COVID-19 impact on the worldwide film industry experienced by China during the pandemic.
- 2. To detect the post-pandemic impacts of COVID-19 on the worldwide film industry experienced by China.
- 3. To analyze the post-pandemic changes and developments in Chinese theatres and films.

3. Methodology

The study focused on the post-pandemic impact of COVID-19 on the worldwide film industry, especially as experienced by the Chinese film industry. So, this study was

exploratory in nature. The data were mainly collected from relevant secondary sources: articles, journals, newspapers, and books.

4. The Obtained Data and Interpretation

4.1 Film Industry during the Pandemic of COVID-19 in China

The COVID-19 pandemic has affected the world economy drastically. Since the world is experiencing a new pandemic, a misunderstanding over immunization and vaccination for its spread and management is causing alarm to the public and influencing people's spending habits (Haroon & Rizvi, 2020). Stock market patterns are a sane portrayal of investment or expenditure patterns, as they are made up of logical and sophisticated people who can forecast future trends and generate profits accordingly (Mirza et al., 2020; Tao et al., 2021).

As with the rest of the world's film industries in 2020, the Chinese film industry had a phenomenal year. Due to the rapid spread of the COVID-19 pandemic, the Spring Festival, which is a typically bustling period for the film business, was unusually quiet. Following then, the theaters remained closed for 178 days. Numerous film crews ceased production, and the film industry was forced to wait for conditions to improve. Several programs were initiated by central and local party leaders and government agencies at all levels to alleviate the burden of this calamity. On 20 July 2020, theaters began to reopen progressively, but they were required to adhere to strict safety regulations. A month later, when The Eight Hundred grossed more than 3 billion RMB at the box office, it signaled the return of the Chinese film market in RMB. During the National Day holiday, approximately 4 billion RMB was earned at the box office nationwide. This demonstrated that despite the pandemic, Chinese people still desired to attend the movies. Sacrifice produced in less than two months, and restored the confidence of the Chinese cinema industry. In 187 days, 2020 earned a total of 20.4 billion RMB at the box office. China took the lead in the global film business during this peculiar year. This indicates that the Chinese film industry and market were the first in the world to be revived (Statista (2021).

4.2 Big Change in Film Industry before and during the Pandemic COVID-19

Film production in 2020 continued the basic trend of declining numbers that had characterized the preceding two years. There were 531 feature-length films produced during the year, including animation, science and educational films, documentaries, and special films. Public screening licenses were issued for 650 domestic films. Figure 1, the downward trend in theatrical film production will likely continue as more films transition to online distribution. This was 37.5 percent less than prior years (China Film News, 2021)

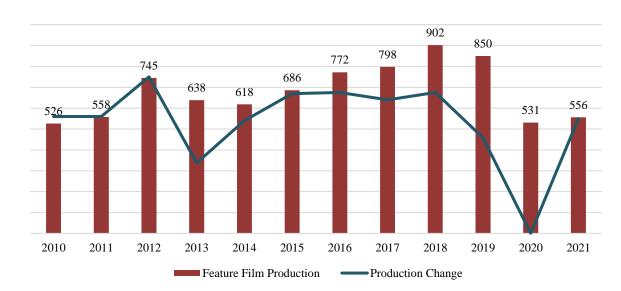


Figure 1: Change in Mainland Feature Film Production from 2010 to 2021 (in units) (China Film News, 2021).

Source: Zhang, Suwannasri & Wang (2023)

Moreover, in 2020, Mainland films made a total of 20.41 billion RMB at the box office or about \$3.12 billion. This was 68.17 percent less than 2019. Comscore mentioned that the worldwide box office for 2020 made \$12.4 billion, 71% less than the year before. Boxoffice Pro (2021) illustrated that the total North American box office for the year was \$2.28 billion, 79% less than the previous year and a record low for North American movies in the past forty years (New Media Center, 2021). China earned more than North America at the box office for the first time and came in the first place worldwide.

There were 280 movies at the theaters. Over 200 of them were made in China, which gave them an 84% market share and 17.15 billion RMB at the box office. Due to a lack of films around the world, fewer films that came from other countries were put out. Only 64 foreign movies were shown, and they made 3.267 billion RMB, which is 16% of the total box office earnings (Figure 2). In the end, the percentage of the market that was made up of domestic films hit a record high in 2020 (Boxoffice Pro, 2021). Additionally, in 2020, 548 million people went to the movies, which was 68.27% less than 2019. The average number of times a person went to the movies in a year was 0.39. The average number of times people in cities went to the movies was 0.65 times per person. During 2020, China watched more movies than any other countries. Because of the pandemic and the rise of new media, both the total number of people who went to the movies and how often they went to the movies went down.

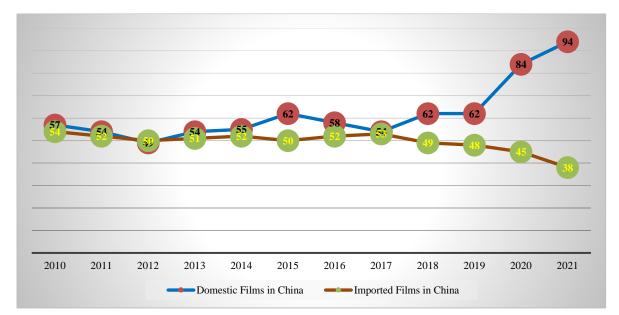


Figure 2: Market Share of Domestic and Imported Films, 2010-2021 in Percentage

Source: Zhang, Suwannasri & Wang (2023)

4.3 China's Cinema Screens

China quickly extended film screens at a brisk rate, adding an average of 19 new screens daily. In 2011, there were 9,000 screens in China, and in 2012 turned into the nation with the highest number of screens (exceeding the U.S.) in 2017, with 45,000 screens. Before the theaters closed amid the COVID-19 pandemic in January 2020, China was projected to have 70,000 screens in above 10,000 cinema theaters, with screening capacity in digital 3D format. Today, China has been recognized as the world's biggest film box office in terms of revenue. Online ticket purchases have heightened competition among the local cinemas. With more than 1.4 billion citizens and a flourishing film industry, China has surpassed the United Sates in film ticket sales for the first time. Movie analysts believe that the Chinese film industry has huge potential to attract more movie-goers if more cinema theaters are opened in the central and western parts of mainland China.

According to China Film News (2021), there were 75,581 screens in 2020 in the mainland Chinese market, a growth of 8.30% from the year before. This was due to the addition of 5,794 screens. Box office receipts were collected from 50 theater chains and 11,856 individual movie theaters around the country (Dengta Movie, 2021). The global screening market has recently become the largest in the world. However, theater management has become increasingly challenging. The average price of a movie ticket in RMB was 37 (Dengta Movie, 2021). The average number of attendees was 9.7, down 3.9% from the previous year (Maoyan Entertainment, 2021). Only 8.1% of the expected people showed up (Dengta Movie, 2021), and the number of people who saw the film on a single screen decreased to 269,000 (a decrease of 70.8%) from what they saw in 2019 (Dengta Movie, 2021). When compared to the rest of the globe, China's film industry's overall figures this year looked impressive. Longitudinal studies, however, also revealed a marked decline in these figures. The unpredictability of the epidemic made it unlikely that the projected numbers for 2020 accurately reflected any objective patterns in the growth of

China's film industry. China's stop-pandemic efforts have helped the industry recover, and the foundations created by nearly two decades of the industrialized reform of the Chinese film industry helped it to survive through the pandemic.

Currently, more and more people are staying at home and watching movies. It is unclear if going to the movies as a cultural tradition will survive the end of the pandemic. 76% of Chinese respondents to the film industry's survey conducted after the COVID-19 outbreak said they would still prefer to watch a movie in a theater because of the special effects (3D) and sound effects. In addition, the improved ambiance and setting attract people to the theatres (Thomala, 2020a, Thomala, 2020b). It is encouraging for the industry that 2020 brought in the best annual box office revenue in history, even though Chinese moviegoers may set a new post-pandemic record high. When asked whether they had watched a movie during the COVID-19 pandemic, 73% of respondents said they used a paid streaming service, and 72% said they would be willing to return to theaters after the pandemic was over. According to the data, over two-thirds (68%) of respondents were interested in learning when local movie theatres would reopen, and over half (55%) were curious about the release dates of upcoming films. Sixty percent of moviegoers surveyed said they expected strict measures from theaters after reopening. In comparison, 58 percent said ticket discounts would be the main reason they would go to the theater again. Forty percent were also interested in the quality of new films. Eighty percent or more of respondents preferred a ticket price of less than 30 Yuan (Maoyan Entertainment, 2020). According to Fu & Shen (2020), the Chinese film business is one of the hardest hit. As theaters in China started to close, reports emerged that as many as 40% of Chinese theaters would have to close because of the COVID-19 outbreak and subsequent lockdown. Due to the current state of affairs, many viewers are turning to online streaming services for their entertainment needs, including viewing Hollywood films that were never shown in theaters (Aftab, 2020). The popularity of online movie streaming services like Netflix, iQiyi, Youku, Tencent, Eros Now, Hulu, Disney Plus, and Amazon Prime Video is a serious threat to the traditional movie-going business model. Another difficulty has been the absence of fresh film releases because of the coronavirus pandemic and its related social limitations (Harper, 2020).

4.4 Post-Pandemic of COVID-19 on the Worldwide Film Industry in China

The global film industry may still be reeling from the effects of COVID-19, but China is busy molding the rest of the world around it. Since the coronavirus emerged, there has been a rapid acceleration in the distribution, exhibition, and viewing of films. The outbreak in China was expected to improve after the film administration decided to keep theaters open after July 2020. When that time came, movie theaters would take the necessary precautions. For instance, moviegoers were to wear masks and refrain from eating and drinking during screenings.

With the recent opening of high-profile theaters, the future of China's film industry appears promising, and the rapid recovery of China's economy will foster substantial global confidence. Confidence in the Chinese economy is rising as more Chinese see that the country's epidemic prevention and control efforts are yielding good results. The rise in China's box office performance is largely due to the government's approval to reopen some

theaters with reduced seating capacities. The new regulations stipulate a 50% limit on indoor seating. Over 5.4 billion RMB (\$797 million) at the Chinese box office was from the over 150 million people who have visited theatres since they reopened. It was a huge hit following the recent resurgence of China's film industry. It is encouraging that films made in China have significantly impacted China's box office. The latest rehabilitation rate in China revealed itself at at 88%, and the number of rehabilitated theaters has reached 9,512 (Chan, 2020). By the end of 2020, movie theaters all over the world were once again bustling. Still, China has taken the lead and surpassed North America in becoming the largest film industry while the economies of other countries, including the United States, were still recovering from the effects of COVID-19.

Normalcy has been restored across all of China's major cities now that the coronavirus outbreak has been controlled. Keeping people safe from the camera while filming is challenging enough. However, the coronavirus has made it challenging for several studios to make creative and original decisions in the lead-up to the shoot, including but not limiting casting, set, and costume design. In a similar vein, the same can be said of post-production processes. Many people have a hand in each cycle stage, from initial brainstorming to final distribution. This includes editors and writers to sound designers, foley artists, and colorists. One small scene that undergoes last-minute editing or endorsement changes could have repercussions for every subsequent trailer and film banner version. Until now, many film studios have never agreed on these options while working remotely; however, they now must adhere to new protocols that may alter the content we see onscreen (Epstein, 2020; Jackson & Williams, 2020).

4.5 The Media and Entertainment Sector in China Showing Significant Signs of Recovery

Chinese theaters have been operating at their full capacity since July 2020, while theaters in many other countries were either closed or screening with reduced seating. Yet, any sector felt the effects of a six-month shutdown pretty heavily. The survival of the film industry appeared to depend on "another way out," which in China and around the world typically took a transitional turn from the traditional film format to the digital screen.

It has been widely anticipated in China that the film industry would be "revolutionized," with theaters gradually becoming *relics of the past* (English translation). This has not occurred as of yet. The week of Chinese New Year (the equivalent of a Christmas movie schedule) this year saw the national box office at 7.82 billion yuan (AUD 15.8 billion), a 32.47% increase from 2019, and the most recent comparable year.

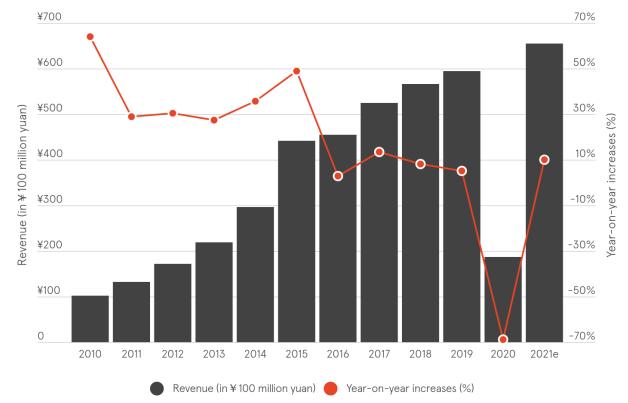


Figure 3: China's National Box Office Revenue (2021 Figures Based on Estimates)

Source: Maoyan Entertainment (2021)

In recent years, Chinese films have made a strong comeback, and many factors have contributed to this phenomenon. The researchers' analysis showed details as follows:

1. This uptick in "vengeance-watching"

China's shutdown was strict and certainly one of the longest ever. Residents of Wuhan's residential complexes (often gated communities) were largely barred from venturing outside their homes for 76 days. Theaters and movie theaters in the areas were hit hard in shut-down for caution. Since the virus was somewhat "terminated" thanks to China's "harsh" measures, the country reopened virtually with full and affirmative access, in contrast to the repeated lockdowns seen in other countries. Everyone wanted to break free and go outside. They were confident enough in crowds to visit places like movie theaters. Local outbreaks were quickly controlled and managed in the strict enforcement of provincial health codes, while the rest of the country was largely unaffected. While "limited restrictions" may still be in effect in other countries, they were only temporary in China. As soon as people felt safe again, they flocked back to the venues, quickly filling up local theaters again.

2. The imposed film ban and subsequent accumulation of "film deposit"

As known, China is not alone in its practice of film censorship. It is only natural that with a film industry cranking out between 600 and 900 new features every year, many movies have to wait their turn before they can be shown. All forms of public video entertainment in China are subject to review by the same censorship body, the China Radio and Television Administration (CRTA). In the absence of a formal rating system, films are subject to strict censorship to ensure they are appropriate for "all audiences." A minimum

of ten critics is required for each film. Understandably, the lengthy time it takes to review and approve films directly results from the large volume of work and the process involved. Frequently, an international audience can watch a Chinese TV series (with uncensored content) via the production company's YouTube Channel before the domestic audience. Production on *Forever Young* began in 2012, but the film did not hit theaters until 2018. The movie theater industry had a backlog of films ready to be shown when the COVID-19 pandemic hit.

3. Home movies with powerful stories

China's film industry has a keen eye for trends and timing, and since theaters resumed operations, there has been a slew of commercial successes. Five ordinary Chinese people from different parts of the country share their experiences in escaping poverty, making a fortune in the big city, or positively impacting their hometowns in the anthology My People, My Homeland. Two different families in A Little Red Flower dealt with cancer and the ultimate meaning of life and death. In "Hi, Mom," the director tells the story of when she and her deceased mother became close as young adults. After a pandemic has claimed many lives, these stories, which are uplifting or deeply moving, are just what the doctor ordered to help people relax again. Meeting their release window was not just the production team's job. The CRTA has also emphasized releasing films like these that reflect the national mood. In *The Eight Hundred*, we learn of the heroic efforts of a small band of Chinese soldiers who stood as the city's last line of defense against the Japanese during a brutal four-day battle. Originally scheduled for release in August 2020, right after the lockdown, it was the perfect soundtrack for a country that had just defeated another enemy. Chinese box office receipts are predicted to rise, but at a slower rate than in previous years due to the effects of COVID-19. Audiences' desire for vengeance in the film may temporarily slow the trend, giving theaters an adrenaline rush. In any case, the trend is clear: the film industry is evolving. That does not mean movie theaters will become extinct any time soon. No matter how much credit you give COVID-19, it is hard to deny that people's tastes are changing. Figure 4 shows the weekly box office revenue of the top movies in China from July 25 to 31, 2022--illustrating the top three weekly movies on the screen in China in July 2022 -- "Moonman" had the highest revenue at \$142.5 million U.S. dollars, followed by "Detective VS. Sleuths" at \$11.6 million U.S. dollars, then "Lighting up the Star" at \$10.3 million U.S. dollars.

Moonman

Detective VS. Sleuths

LIGHTING UP THE STARS

Mozart From Space

Jurassic World: Dominion

KAKA

1.4

CRAZY.KWAI.BOO Sanxingdui Spirited Away

Love Can't Be Said

My Little Pony: A New Generation

Octonauts: The Caves of Sac Actun

0 25 50 75 100 125 150 175

Box office revenue in million U.S. dollars

Figure 4: Weekly Box Office Revenue of the Leading Movies in China from 25-31 July 2022 (in million U.S. dollars)

Source: Statista (2022)

4.6 Future of Chinese Film Industry

China's control of the COVID-19 over a couple of months with no local cases has given the country a unique opportunity to become the biggest film industry market in the worldwide box office. And since no major new Hollywood movies were set back in 2021, it looks like the U.S. film industry would need time to recuperate in 2020 onward as the globally largest box office. It can be predicted that more than 1.4 billion citizens, globally highest 70,000 screens and a thriving film industry in the Chinese film industry have proved the world's largest market and the biggest global box office in the coming decades (Frater, 2020; Sims, 2020; Whitten, 2020). The post-COVID-19 recommendations and reforms are what the Chinese film industry can learn its lessons from the impact of COVID-19 pandemic and lockdown, which saw billion dollars loss and many people lost their jobs and contracts as the pandemic took a strong hold. Now it is time to learn from the past and adapt a new framework for production under safety protocols and process as the industry as a whole getting back on its feet. In the post-lockdown, now normal is new normal in that the film industry must carry on despite the immense hardship brought by the pandemic.

The researchers have studied the local film industry in China and would like to see the government helps expand the entire industrial chain of Chinese film, from ticket sales to the creation of intellectual property to the use of product placement in films to the creation of theme parks, in order to maximize the industry's financial success. If China wanted to match the U.S. in terms of screen density per person, it would need to add 95,000 new theaters. These steps taken in the wake of COVID-19 have the potential to bring in a more diverse audience and support the Chinese film industry to win its domestic and global box office crown in the years to come.

The government should facilitate the acquisition of licenses for the film industry and investors in a timely and straightforward manner. The Chinese film industry should keep improving the availability and features of online ticketing services. The Chinese film industry also needs to prioritize improving production values in order to compete on a

global scale. Filmmakers, then, who want to secure a solid future, must steadfastly pursue "quality-oriented" strategies.

If theaters really want to attract more viewers, they should start offering screenings for free, particularly in the cinematic environment with larger screens and more realistic sound effects. Movies have a lot of "soft power" and can help a country's reputation abroad. When it comes to influencing others, China has proudly considered itself years ahead of the rest of the world. The Chinese film industry can tell the world more about many other fascinating stories of the country.

The period after COVID-19 would see a paradigm shift, and there will be a great deal to learn from the past. The entire Chinese film industry--investors, producers, directors, and actors--must concentrate on this massive change for the industry to survive. As known to film producers in China, there has not been any success with an authentic multifaceted coproduction. Coproduction needs to start from the ground up if Chinese films are to be appreciated and watched by a global audience, or vice versa. Writing a good script is crucial. There are a lot of talented Chinese screenwriters, but they have a lot to learn from Hollywood in terms of story and international structure.

Chinese moviegoers have their concern over health precaution measures in theaters. The motion picture industry, in the wake of the pandemic, should improve air circulation inside movie theaters. But directors, filmmakers, and artists tend to pay attention to streaming effects on traditional movie theaters. A big-budget movie should always be saved for the theater with good conditions of ventilation and internal air purification for viewers' health. These present challenges to all stakeholders in the movie industry urgently now and beyond.

Drive-in theaters, also known as drive-in cinemas or drive-in complexes, have several advantages over traditional movie theaters, which are located in climate-controlled buildings, in the post-pandemic era of large Chinese cities. The decision to build a drive-in theater large enough to accommodate hundreds of cars was made by the owners of many smaller theaters in rural areas. Then, people should be able to watch movies on their balconies thanks to a mobile cinema that is both innovative and welcoming. The Chinese film industry would benefit from a rise in the median number of domestic film releases, which would boost earnings at the country's multiplexes. In addition, social media platforms like Weibo, Wechat, and Youku can offer significant benefits for filmmakers by allowing them to collect pilot audience feedback before a film's official release. In addition, the film's producer could benefit from allocating more resources for advertising.

The next step is for Chinese filmmakers to take cues from Hollywood and make movies that can be enjoyed by a wide range of people. The movie industry, both internationally and in China, is evolving rapidly, and traditional theaters must now contend with more than just online streaming services. They are rivals for your time and will both have to adjust to the new circumstances. Cinemas across the board, including in China, need to lower ticket prices and provide special discounts to attract customers, in addition to raising the bar on the quality of their latest releases.

Filmmakers may need to make aesthetic and narrative changes, as well as get inventive with their locations and camera techniques. Chinese theaters need a steady stream of new films to draw in customers and keep business afloat. In the future, film editing can

be done from home, and the industry should remove barriers to this practice. China's film industry must also adapt to the changing digital landscape by allowing workers to complete pre-production, post-production, and marketing and promotion tasks from home. Writers and directors in China should attract creative young people into the film industry for sustainable competitive advantages in the international market to increase their market share in the long run.

5. Conclusion

Movie theaters are struggling to stay open. The current situation calls for a dramatic shift in ideology, and venues like streaming services and movie theaters can help make that happen. Theaters and moviegoers in China have been through a "run-in period" since the standard anti-epidemic measures were implemented in 2020. Consumer confidence in the Chinese market is rising as the country's epidemic prevention and control situation improve. Simultaneously, the success of Chinese films at the worldwide box office has emerged out of China's post-COVID-19 period. Up to September 2020, 90 percent of China's movie theatres underwent the process of rehabilitation (Brzeski, 2020).

It should be noted that the Chinese box office revival could be compared with that of its competitor—the United States. However, the U.S. news outlet CNBC asserted that the comparison might not be relevant. The Chinese film industry has considered Hollywood the largest box office worldwide. The United States primarily produces commercial films for profit, but the Chinese film industry has combined patriotism with commercialism as a trend in producing films across various genres. In recent years, filmmakers in China have expressed rising optimism about the future of their country's film industry. There is concern that the coronavirus could make life more challenging for the international film industry, leading to a drop in the number of Hollywood, Bollywood, and other films imported into China. Producers in China need to keep working to restore their country's film industry's standing for a better and brighter future ahead of it.

To the researchers, China's economy has a bright future ahead of it. The world now has much more faith in the global economy with awareness of China's steady economic rebound. China's economic recovery is picking up its speed despite the country's efforts to control the virus, which may help narrow the gap between the Chinese and American economies. The moviegoing public has returned to local theaters, and boosted Chinese films to dominate the box office in recent years. As reported earlier in this paper, the number of moviegoers showed the largest increase in the fourth quarter of 2020. Despite widespread despair resulting from COVID-19, cinemas have consistently proven resilient with unrelenting support from the Chinese public. China would certainly want to see itself as the first country to have a full recovery from the effects of COVID-19 on the local film industry. In so doing, the country would need digital revolution for its growth in the film industry revenue with improved infrastructure and health-based atmosphere of movie theaters. Optimistically speaking, China's film industry would need to venture into cutting-edge genres for success in its production with ultimate goals on winning over both local and international audiences.

6. The Authors

The three authors--Jin Zhang, Isaree Suwannasri, and Lei Wang—are doctoral candidates in the Technology, Education and Management Program, Graduate school of Business and Advanced Technology Management, Assumption University, Thailand. The researchers share their academic and research interest in the areas of entertainment business operations, digital technology application and advancement, and current technical issues and innovations in general/educational management.

7. References

Aftab, K. (2020). Why Cinemas Will Bounce Back from the Coronavirus Crisis. (Online). https://www.bbc.com/culture/article/20200403-why-cinemas-will-bounce-back-from-the-coronavirus-crisis, April 6, 2020.

Ashraf, B. N. (2020). Economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets. *Journal of Behavioral and Experimental Finance*, 2020, 27, 100371. https://doi.org/10.1016/j.jbef.2020.100371.

Baker, S. R., Bloom, N., Davis, S. J., Kost, K., Sammon, M. & Viratyosin, T. (2020). The unprecedented stock market reaction to COVID-19. *The Review of Asset Pricing Studies*, 2020, 10(4), 742-758. https://doi.org/10.1093/rapstu/raaa008.

Boxoffice Pro. (2021). Global Box Office Down 71% in 2020, China Supplants North America as Top Market. (Online). https://www.boxofficepro.com/global-box-office-down-71-in-2020-china-supplants-north-america-as-top-market/, November 11, 2021.

Brzeski, P. (2020). It's Official: China Overtakes North America as World's Biggest Box Office in 2020. (Online). https://www.hollywoodreporter.com/news/its-official-china-overtakes-north-america-as-worlds-biggest-box-office-in-2020, October 18, 2020.

Chakraborty, I. & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, 728, 138882. https://doi.org/10.1016/j.scitotenv.2020.138882.

Chan, H. M. (2020). 60 Days, 150M Visitors, \$795m Box Office: How Did Chinese Cinemas Recover So Fast Post COVID-19? (Online). https://celluloidjunkie.com/2020/10/02/60-days-150m-visitors-7-9bn-bo-how-did-chinese-cinemas-recover-so-fast-post-covid-19/, October 2, 2020.

China Film News. (2021). China Film Administration Releases Data: National Film Market Box Office 20.417 Billion RMB in 2020. (Online). https://mp.weixin.qq.com/s/RDqWVSD5_RscakwfP07Rjg., November 5, 2021.

Dengta Movie. (2021). 2020 China Film Market Annual Overview. (Online). https://mp.weixin.qq.com/s/vlQGDnAclZ8QvoOIUHAJdQ, October 5, 2021.

- Epstein, A. (2020). Hollywood is getting back to work with new protocols that could change what we see on screen. (Online). https://qz.com/1866087/hollywood-can-resume-production-with-new-health-protocols/, June 9, 2020.
- Frater, P. (2020). What Happens After China Takes the Global Box Office Crown? (Online). https://variety.com/2020/film/asia/china-overtakes-north-america-box-office-crown-1234813145/, October 23, 2020.
- Fu, M. & Shen, H. (2020). COVID-19 and corporate performance in the energy industry. *Energy Research Letters*, 2020, 1(1), 129-167.
- Gu, X., Ying, S., Zhang, W. & Tao, Y. (2020). How do firms respond to COVID-19? First evidence from Suzhou. *Emerging Markets Finance and Trade*, 2020, 56(10), 2181-2197. https://doi.org/10.1080/1540496X.2020.1789455.
- Guan, W., Ni, Z., Hu, Y., Liang, W., Ou, C., He, J., Liu, L., Shan, H., Lei, C. & Hui, D. S. (2020). Clinical characteristics of 2019 novel coronavirus infection in China. MedRxiv. *The New England Journal of Medicine*, 2020, 382(18), 1708-1720. https://doi.org/10.1056/NEJMoa2002032.
- Haroon, O. & Rizvi, S. A. R. (2020). COVID-19: Media coverage and financial markets behavior-A sectoral inquiry. *Journal of Behavioral and Experimental Finance*, 2020, 27, 100-343. https://doi.org/10.1016/j.jbef.2020.100343.
- Harper, J. (2020). Thousands of Cinemas in China under Threat of Closure. (Online). https://www.bbc.com/news/business-52901143, June 4, 2020.
- Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J. & Zenghelis, D. (2020). Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? *Oxford Review of Economic Policy*, 2020, 36(1), 359-381. https://doi.org/10.1093/oxrep/graa015.
- Hu, Y.-J., Liu, Y. & Xiao, X.-H. (2009). Investigation of the interaction between berberine and human serum albumin. *Biomacromolecules*, 2009, 10(3), 517-521. https://doi.org/10.1021/bm801120k.
- Hu, X., Sun, Y., Liu, J., Meng, J., Wang, X., Yang, H., Xu, J., Yi, K., Xiang, S., Li, Y., Yun, X., Ma, J. & Tao, S. (2019). The impact of environmental protection tax on sectoral and spatial distribution of air pollution emissions in China. *Environmental Research Letters*, 2019, 14(5), 054013. https://doi.org/10.1088/1748-9326/ab1965.
- Jackson, P. & Williams, K. (2020). Hollywood must adapt to remote work or suffer the consequences. (Online). https://fortune.com/2020/07/01/hollywood-film-remote-work-coronavirus/ July 1, 2020.
- Liu, H., Wang, Y., He, D. & Wang, C. (2020). Short term response of Chinese stock markets to the outbreak of COVID-19. *Applied Economics*, 2020, 52(53), 5859-5872. https://doi.org/10.1080/00036846.2020.1776837

Maoyan Entertainment. (2021). 2020 Film Market Data Insights. (Online). https://mp.weixin.qq.com/s/EKIg6fth72FbOBjCyuv28Q, November 22, 2021.

Mirza, N., Hasnaoui, J. A., Naqvi, B. & Rizvi, S. K. A. (2020). The impact of human capital efficiency on Latin American mutual funds during Covid-19 outbreak. *Swiss Journal of Economics and Statistics*, 2020, 156(1), 1–7. https://doi.org/10.1186/s41937-020-00066-6.

New Media Center. (2021). 2020 China Film Annual Survey Report. (Online). https://www.sohu.com/a/441844393_157635, June 8, 2021.

Park, C.-Y., Villafuerte, J. & Abiad, A. (2020). An Updated Assessment of the Economic Impact of COVID-19. Asian Development Bank.

Reinhart, C. (2020). This time truly is different. *Project Syndicate*, 2020, 23. https://www.projectsyndicate.org/commentary/covid19-crisishas-no-economic-precedent-by-carmen-reinhart-2020-03.

Rizvi, S. K. A., Mirza, N., Naqvi, B. & Rahat, B. (2020). Covid-19 and asset management in EU: A preliminary assessment of performance and investment styles. *Journal of Asset Management*, 2020, 21(4), 281–291. https://doi.org/10.1057/s41260-020-00172-3.

Sims, D. (2020). Hollywood's Tenet Experiment Failed; Christopher Nolan's Blockbuster Was Supposed to save U.S. Theaters. Now the Future Looks Bleaker than Ever. (Online). https://www.theatlantic.com/culture/archive/2020/09/hollywoods-tenet-experiment-didntwork/616345/, September 14, 2020.

Statista. (2021). *Leading Box Office Markets Worldwide in 2020, by Revenue*. (Online). https://www.statista.com/statistics/243180/leading-box-office-markets-workdwide-by-revenue/, September 18, 2021.

Statista. (2022). Weekly Box Office Revenue of the Leading Movies in China from July 25 to 31, 2022. (Online). https://www.statista.com/statistics/1306350/, July 18, 2022.

Tao, R., Su, C.-W., Xiao, Y., Dai, K. & Khalid, F. (2021). Robo advisors, algorithmic trading and investment management: Wonders of fourth industrial revolution in financial markets. *Technological Forecasting and Social Change*, 2021, 163, 120421. https://doi.org/10.1016/j.techfore.2020.120421.

Thomala, L. L. (2020a). Major factors for cinema visits after coronavirus pandemic in China 2020. (Online). https://www.statista.com/statistics/1147700/china-reasons-for-visiting-cinemas-after-coronavirus-lockdown/#statisticContainer, Aug 11, 2020.

Thomala, L. L. (2020b). Preferred ways of watching movies after coronavirus pandemic in China 2020. (Online). https://www.statista.com/statistics/1147663/china-preferred-film-consumption-method-after-coronavirus-lockdown/, August 11, 2020.

Whitten, S. (2020). More than a third of US adults say movie theaters should close amid coronavirus outbreak. (Online). https://www.cnbc.com/2020/03/11/hollywood-sales-threatened-as-coronavirus-pandemic-worsens.html, March 11, 2020.

Yarovaya, L., Mirza, N., Rizvi, S. K. A. & Naqvi, B. (2020). COVID-19 pandemic and stress testing the eurozone credit portfolios. *Social Science Research Network*. https://doi.org/10.2139/ssrn.3705474.