

The determinants of foreign box office revenue for English language movies

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Abstract

This paper examines the determinants of foreign box office revenue for English language movies. The sample consists of 449 films released during 2006-2008. Regression results indicate the primary determinants of foreign box office revenue for English language movies are U.S. domestic box office revenue, action movies, children's movies, sequels, Academy Award wins, and production budget. Specific results include the observation that action movies increase foreign box office revenues fifteen to twenty-six million dollars, children's movies add approximately twenty-four million dollars, an academy award win is worth over nine million dollars, and the built in audience from sequels add thirty-one to thirty-six million dollars in foreign box office revenue.

Keywords: Academy Award, Action Movies, Children's Movies, Foreign Box Office, Movie Revenue, Movie Sequels

Introduction

The average budget of a motion picture for release in the United States has risen to over fifty million dollars per movie. This rising cost has resulted in motion picture studios seeking multiple sources of revenue beyond the domestic box office, which include foreign box office options, product placement, merchandising, video sales, and video rental revenue. A single movie can be the difference between millions of dollars of profits or losses for a studio in a given year (Simonoff & Sparrow, 2000). The purpose of this research is to analyze the motion picture industry with a focus on the determinants of foreign box office revenues of English language movies produced for a primary release in the United States. The importance of the foreign box office cannot be ignored given average revenues per film in the foreign markets have surpassed the U.S. domestic market.

This manuscript is divided into four sections. First, a survey of the related literature is discussed. The second section provides the model specification. The third section puts forth an empirical evaluation of the determinants of foreign box office revenues for 449 films released during the years 2006-2008. The final section offers concluding remarks.

Survey of the Literature

Many researchers have developed models that explore the potential determinants of motion picture box office performance. Litman (1983) was the first to develop a multiple regression model in an attempt to predict the financial success of films. The original independent variables in the landmark work include movie genre (science fiction, drama, action-adventure, comedy, and musical), Motion Picture Association of America rating (G, PG, R and X), superstar in the cast, production costs, release company (major or independent), Academy Awards (nominations and winning in a major category), and release date (Christmas, Memorial Day, summer). Litman's model provides evidence that the independent variables of production costs, critics' ratings, science fiction genre, major distributor, Christmas release, Academy Award nomination, and winning an Academy Award are all significant determinants of the success of a theatrical movie. Litman and Kohl (1989), Litman and Ahn (1998), and Terry, Butler, and De'Armond (2004) have replicated and expanded the initial work of Litman. None of the extensions of Litman's work has focused on the determinants of foreign box office revenue.

One strong area of interest in the movies literature has been the role of the critic (Weiman, 1991). The majority of studies find that critics play a significant role on the success or failure of a film. Eliashberg and Shugan (1997) divide the critic into two roles, the influencer and the predictor. The influencer is a role where the critic will influence the box office results of a movie based on his or her review of the movie. Eliashberg and Shugan's results suggest that critics do have the ability to manipulate box office revenues based on their review of a movie. The predictor is a role where the critic, based on the review, predicts the success of a movie but the review will not necessarily have an impact on how well the movie performs at the box office. Eliashberg and Shugan show that the predictor role is possible but does not have the same level of statistical evidence as the influencer role.

King (2007) explores the theoretical power and weakness of critics on the box office performance of movies. The substantial market power of critics is derived from the following:

(1) Film reviews are widely available in newspapers, magazines, and websites. The ubiquitous availability of critical reviews in advance of a movie release creates positive or negative energy in the critical opening weeks; (2) Film critics regard themselves as advisors to their readers. They are often as explicit in their recommendations as Consumer Reports is about other consumer purchases; and (3) Film critics are likely to be considered objective. There are too many critics and too many films for serious critical bias to develop. Those who are skeptical about the influence of film critics point to the following counter arguments: (1) It is possible that the effects of aggressive marketing at the time of a film's release might dominate critical evaluations in determining opening attendance; (2) Critics may raise issues that do not concern most audiences. They are more likely to notice and comment on technical issues, like cinematographic technique, than the average member of the audience; and (3) Critics may write for a readership that has different tastes from the average cinemagoer. The most obvious potential reason for this is demographic. Cinema audiences are younger than the general population and less likely to pay attention to print reviews. Critics might therefore, be expected to aim their reviews at the older demographic audience and give relatively negative reviews to certain film genres. The empirical results put forth by King (2007) are mixed with respect to the impact of critics on box office earnings for the U.S. box office in 2003. He finds zero correlation between critical ratings for films and gross box office earnings when all releases are considered because of the affinity critics have for foreign movies and documentaries relative to the general public. For movies released on more than 1,000 screens, critical ratings have a positive impact on gross earnings.

Reinstein and Snyder (2000) focus on the critics Siskel and Ebert and how their reviews impact box office success. The authors report that the correlation between good movie reviews and high demand might be false due to unknown quality measurements. In order to circumvent the proposed false correlation Reinstein and Snyder apply a "differences in differences" approach that yields a conclusion that positive reviews have a surprisingly large and positive impact on box office revenue. Reinstein and Snyder also report that their results show that the power to influence consumer demand does not necessarily lie in the entire critic population, but may lie in the hands of a few critics.

Wallace, Seigerman, and Holbrook (1993) employ a sample of 1,687 movies released from 1956 through 1988 to investigate the relationships between movies box office success and critic ratings. They find a poorly rated movie will actually lose money for every positive review it receives while a highly rated movie will continue to gain money for every positive review it receives. Wallace, Seigerman, and Holbrook (1993, p. 11) interpret these findings by saying that "it appears that a bad movie has something to gain by being as trashy as possible. ... [For] a good movie, it apparently pays to strive for even greater excellence." Ravid (1999) has also looked at movie reviews as a source of projecting higher revenues. He concludes that the more reviews a film receive, positive or negative, the higher revenues it will obtain.

Although much research has supported the critic as a positive indicator of box office success, others have shown that the critic plays a much less important role. Levene (1992) surveyed students at the University of Pennsylvania and concludes from her 208 useable surveys that positive critic reviews ranked tenth, behind plot, subject, and word-of-mouth on a list of factors that influence the decision to watch a film. Levene's study reveals that theatre trailers and television advertising were the two most important determinants. Faber and O'Guinn (1984) conclude that film advertising, word-of-mouth and critics' reviews are not important compared to the effect that movie previews and movie excerpts have on the movie going public. Wyatt and

Badger (1984) find that negative or positive reviews have little effect on the interest of an individual to see a movie over a mixed review or seeing no review. Further research by Wyatt and Badger (1987) conclude that positive reviews and reviews that contain no evaluative adjectives, which they called non-reviews, are deemed more interesting than a review that was negative or mixed. More recently, Wyatt and Badger (1990) report that reviews containing high information content about a movie raise more interest in a film than a positive review.

Research has shown a seasonal pattern in movie releases and box office performance. Litman (1983) reports that the most important time for a movie release is during the Christmas season. Sochay (1994) counters this with evidence that the summer months are the optimal time of year to release a motion picture. Sochay, referencing Litman (1983), explains his conflicting results are due to competition during the peak times. Sochay adds that the successful season will shift from the summer to Christmas in different years due to film distributors avoiding strong competition. Radas and Shugan (1998) developed a model that captures the seasonality of the motion picture industry and apply it to the release of thirty-one movies. The authors find that the length of a movie release on average is not longer during the peak season but peak season movies typically perform better at the box office. Einav (2001) investigates seasonality in underlying demand for movies and seasonal variation in the quality of movies. He finds that peak periods are in the summer months and the Christmas season because distributors think that is when the public wants to see movies and when the best movies are released. He comments that distributors could make more money by releasing “higher quality” movies during non-peak times because the movie quality will build the audience and there will be less competition than at peak times.

Film ratings passed down from the Motion Picture Association of America (MPAA) may also influence box office performance. Many film companies fight for a better rating, often re-shooting or re-editing scenes multiple times in order to get their preferred ratings, most often being PG or PG-13 because these ratings exclude virtually no one from seeing the movie. Sawhney and Eliashberg (1996) develop a model where the customer’s decision-making process on whether to see a movie can be broken into a two-step approach, time-to-decide and time-to-act. The results of their study show that movies with an MPAA rating of restricted (rated R) perform worse at the box office than movies without a restricted rating. The analysis shows that restricted rated movies have a higher time-to-act but have longer time-to-decide periods than family movies. Terry, Butler, and De’Armond (2004) verify the negative impact of the restricted rating on box office performance, providing evidence of a penalty in excess of \$10 million. Ravid (1999) provides evidence from a linear regression model that G and PG rated films have a positive impact on the financial success of a film. Litman (1983) on the other hand, finds that film ratings are not a significant predictor of financial success. Austin (1984) looks at film ratings in an attempt to find a correlation between ratings and movie attendance but find no significant relationship.

Anast (1967) was the first to look at how film genre relates to movie attendance. His results show that action-adventure films produce a negative correlation with film attendance while films containing violence and eroticism had a positive correlation. Litman (1983) shows that the only significant movie genre is science fiction. Sawhney and Eliashberg (1996) use their two-step approach and find that the drama genre has a slower time-to-act parameter while action movies result in a faster time-to-decide than other movie genres. Neelamegham and Chinatagunta (1999) employ a Bayesian model to predict movie attendance domestically and

internationally. They find that across countries the thriller and action themes are the most popular, while romance genre was the least popular.

Awards are important to every industry but few industries experience financial compensation from an award more than the motion picture industry. Litman (1983) shows that an Academy Award nomination in the categories of best actor, best actress, and best picture is worth \$7.34 million, while winning a major category Academy Award is worth over \$16 million to a motion picture. Smith and Smith (1986) point out that the power of the Academy Award explanatory variable in models explaining patterns in movie rentals will change over time as the effects of different Academy Awards could cause both positive and negative financial results to a movie in different time periods. Nelson, Donihue, Waldman, and Wheaton (2001) estimate that an Academy Award nomination in a major category could add as much as \$4.8 million to box office revenue, while a victory can add up to \$12 million. The authors find strong evidence toward the industry practice of delaying film releases until late in the year as it improves the chances of receiving nominations and monetary rewards. Dodds and Holbrook (1988) look at the impact of an Academy Award after the nominations have been announced and after the award ceremony. The authors find that a nomination for best actor is worth about \$6.5 million, best actress is worth \$7 million and best picture is worth \$7.9 million. After the award ceremony the best actor award is worth \$8.3 million, best picture is worth \$27 million, and best actress award is not statistically significant. Simonoff and Sparrow (2000) find that for a movie opening on less than ten screens, an Academy Award nomination will increase the movies expected gross close to 250% more than it would have grossed if it had not received the nomination. For movies opening on more than ten screens, an Academy Award nomination will increase the movies gross by nearly 30%.

Literature investigating movie revenue streams beyond the domestic box office are limited. Terry and De'Armond (2008) employ regression analysis to investigate the determinants of movie video rental revenue. They find domestic box office, Academy Award nominations, and domestic release exposure to be positive and significant determinants of movie video rental revenue. Time to video, sequels, and children's movies are shown to have a negative and statistically significant impact on video rental revenue.

Data and Model

Predicting the financial performance of feature films is widely regarded as a difficult endeavor. Each film has a dual nature, in that it is both an artistic statement and a commercial product (Sochay, 1994). Many studies have attempted to estimate the determinants of box office performance by employing empirical models to a limited number of high profile features. The approach of this study provides a unique focus on the determinants of foreign box office revenue. The sample includes a total of 449 motion pictures for the year 2006-2008.

The primary source of data for this study is the Rotten Tomatoes website (rottentomatoes.com). The website is a unique rating system that summarizes positive or negative reviews of accredited film critics into an easy to use total percentage that is aggregated for each motion picture. In addition to providing a system of aggregate reviews, the website also contains information pertaining to revenue, release date, movie rating, and genre. Movies.com, Oscars.org, WorldwideBoxoffice.com, boxofficemojo.com, imdb.com, and the-numbers.com are additional sources of data and information.

The empirical model employed to investigate the determinants of foreign box office performance for this study is specified as:

$$(1) \text{FBOXOFFICE}_i = B_0 + B_1\text{DBOXOFFICE}_i + B_2\text{ACTION}_i + B_3\text{CHILDREN}_i + B_4\text{RESTRICTED}_i + B_5\text{SEQUEL}_i + B_6\text{CRITIC}_i + B_7\text{AWARD}_i + B_8\text{BUDGET}_i + u_i$$

where FBOXOFFICE is foreign box office earnings in millions of dollars, DBOXOFFICE is domestic box office earnings, ACTION is a categorical variable for movies in the action genre, CHILDREN is a categorical variable for movies in the genre of children's movie, RESTRICTED is a categorical variable for movies with a restricted rating (Rated R), SEQUEL is a categorical variable for movies that are derived from a previously released film, CRITIC is the percent composite approval rating for a film by a group of leading film critics, AWARD is the number of Academy Awards a film earned, and BUDGET controls for the estimated production and promotion costs for each movie. Several alternative model specifications were considered including control variables for independent films, presence of an established star actor or director, Academy Award nominations, holiday release, and new release competition. Inclusion of these variables into the model created problems with multicollinearity concerns with other variables included in the model. For these reasons, they are not included in the final model.

Table 1: Summary Statistics of Foreign Box Office Revenue (2006-2008)

Variable	Mean	Maximum	Minimum	Standard Dev.
FBOXOFFICE	69.255	651.6	0.1	104.70
DBOXOFFICE	60.684	531.9	8.400	65.323
ACTION	0.17	1	0	0.373
CHILDREN	0.15	1	0	0.354
RESTRICTED	0.33	1	0	0.471
SEQUEL	0.14	1	0	0.345
CRITIC	48.31	96	1	27.306
AWARD	0.131	8	0	0.604
BUDGET	50.003	270.000	0.0001	46.757

n = 449

Descriptive statistics for the model variables are presented in Table 1. The average foreign box office revenue in the sample is \$69.255 million, with a maximum of \$651.6 million (Pirates of the Caribbean: Dead Man's Chest) and minimum of \$0.1 million (ATL). Three movies in the sample earned over \$600 million in foreign box office revenue (Pirates of the Caribbean: Dead Man's Chest, Pirates of the Caribbean: At World's End, and Harry Potter and the Order of the Phoenix). The average domestic box office earnings are \$60.684 million, with eight movies earning more than \$300 million domestically (Pirates of the Caribbean: Dead Man's Chest, Pirates of the Caribbean: At World's End, The Dark Knight, Spider-Man 3, Shrek the Third, Transformers, Iron Man, and Indiana Jones and the Kingdom of the Crystal Skull). Action movies characterize 17 percent of the research sample, 15 percent target children, 33 percent of the movies in the sample have a restricted rating, and 14 percent are sequels. Average critical rating of the movies in the research cohort is approximately 48 percent positive with a standard deviation of 27.3. Slumdog Millionaire is the film with the most Academy Award wins

in the sample, leading the way with 8. The budget for movies in the research sample varies from a low of \$100,000 (Facing the Giants) to a high of \$258 million (Spider-Man 3).

Determinants of Foreign Box Office Revenue

The estimated empirical relationship between the explanatory variables and foreign box office revenue is presented in Table 2. Two model specifications are put forth based on incomplete data for the BUDGET variable. The first is the full model, which includes all 449 movies in the sample. The second specification only includes the 309 movies that have BUDGET information available. The full and reduced model specifications are extremely consistent. Both models explain approximately 75 percent of the variance in foreign box office revenue. None of the independent variables have a correlation higher than 0.70 (DBOXOFFICE and BUDGET have the highest correlation), suggesting that excessive multicollinearity is not a problem with the analysis. Seven out of the nine independent variables are statistically significant in at least one model specification.

Table 2: Determinants of Foreign Box Office Revenue (2006-2008)

Variable	Full Model Coefficient (t-statistic)	Reduced Model Coefficient (t-statistic)
Intercept	-23.122 (-4.08)*	-30.987 (-3.95)*
DBOXOFFICE	1.21545 (26.46)*	1.03481 (15.85)*
ACTION	26.0155 (3.55)*	15.6068 (1.89)*
CHILDREN	24.0593 (3.18)*	24.1938 (2.44)*
RESTRICTED	-1.1009 (-0.19)	1.77661 (0.24)
SEQUEL	31.1636 (3.94)*	36.3672 (3.91)*
CRITIC	0.11409 (1.14)	0.10439 (0.82)
AWARD	9.57347 (2.20)*	10.1362 (2.12)*
BUDGET		0.43512 (4.13)*
n	449	309
Adj. R-square	0.748	0.776
F-value	190.65*	134.47*

Notes: *p<.05

The first variable in the model is domestic box office earnings (DBOXOFFICE). The empirical results indicate that domestic box office has a positive and statistically significant impact on foreign box office revenue. Most English language movies are released in the U.S. domestic market before the foreign market. The results imply that the domestic box office serves as a good indicator of foreign box office success, with every dollar in domestic box office yielding slightly more than a dollar in foreign box office revenue. There are several possible explanations for the consistent relationship. Movies that perform well at the domestic box office may serve as a signal that a movie is good and builds positive momentum for the foreign box office. In fact, only Mamma Mia (\$144.1 million domestic box office revenue, \$458.8 million foreign box office revenue), The Mummy: Tomb of the Dragon Emperor (\$102.5 million domestic box office revenue, \$298.6 million foreign box office revenue), and The Golden

Compass (\$70.1 million domestic box office revenue, \$302.1 million foreign box office revenue) are top thirty foreign box office revenue earners without being top thirty domestic box office performers. A second possible explanation for the positive relationship between the domestic and foreign box offices is the continued homogenization of global cultures. It should not be surprising for the domestic and foreign box office to mirror each other given that the modern world is characterized by expeditious global travel opportunities, the information age, retail marketing, and global corporations that contribute to creating lifestyle ideals that are increasingly similar across international borders. In addition, popular movies from the U.S. domestic market might provide an opportunity for some English as second language individuals to passively practice language skills via an entertaining vehicle.

One commonly used, yet rarely found to be significant contributor to box office success is the content category (Litman, 1983; Litman & Kohl, 1989; Sochay, 1994). Two variables are used to control for content or type of genre in this study. They are ACTION and CHILDREN. The variables are included in the model based on the general observation that action movies like Indiana Jones and the Kingdom of the Crystal Skull (\$470 million in foreign box office revenue), Spider-Man 3 (\$554 million in foreign box office revenue), Casino Royale (\$427 million in foreign box office revenue) and children's movies like Shrek the Third (\$476 million in foreign box office revenue) and Kung Fu Panda (\$416 million in foreign box office revenue) are some of the most successful motion pictures in the research sample. In fact, 27 of the top 30 foreign box office performers in the research sample are classified as an action or children's movie. Not surprisingly, both genre variables are positive and statistically significant in this study. The positive impact of the action genre on the foreign box office can be explained by the fact that action movies easily transcend various languages and cultures. The coefficient on the ACTION variable implies action movies add \$15 million to \$26 million to foreign box office revenues. The large difference in the magnitude of the ACTION regression coefficient across the two model specifications can be explained by the observation that inclusion of the BUDGET variable has a significant impact on the ACTION variable based on the fact that many action movies are also relatively big budget movies. Children's movies also appear to have a strong global audience. The coefficient on the CHILDREN variable implies children's movies add \$24 million to foreign box office sales. The result implies taking a child to see a popular culture children's movie like Ratatouille (\$415 million in foreign box office revenue), Ice Age: The Meltdown (\$457 million in foreign box office revenue), Madagascar: Escape 2 Africa (\$422 million in foreign box office revenue), or Wall-E (\$311 million in foreign box office revenue) is an experience shared in several different countries.

Another element that can impact the financial performance of a film is the rating assigned by the Motion Picture Association of America. The motion picture industry established the code as a means of giving advance information to parents and others about the theme and treatment of films. This voluntary code was adopted to prevent stringent forms of governmental controls. There are four possible ratings given to films in the research sample—G (general audiences), PG (parental guidance suggested), PG-13 (possibly unsuitable for children less than 13 years of age), and R (restricted; children not admitted unless accompanied by an adult). The conventional wisdom is that the family product sells, while an adult theme or treatment has a limited customer base because of age restrictions preventing access to the lucrative teenage market. The restricted rating is revealed to be statistically insignificant in this study. The statistical result implies the foreign movie market does not contain a financial penalty or financial reward for movies containing content restricted to adults.

The movie sequel has been around for many years but the 2006-2008 years are truly dominated by the sequel. A total of 63 sequels are offered in the sample, with twenty-two breaking the \$200 million mark in foreign box office revenue. Sequels are produced to capture an existing audience associated with the success of a previously popular film. There are no guarantees in the motion picture industry but the positive relationship between moviegoers and a specific storyline and characters is extremely close. The SEQUEL variable is defined in this study as a movie derived from previous released material (e.g., sequel, prequel, or remake). The results indicate the variable has a positive and statistically significant impact on foreign box office revenue. The SEQUEL coefficient ranges between \$31 million and \$36 million. The success of the sequel in the research sample includes several blockbusters. In fact, the four top foreign box office performers in the research sample are the sequels *Pirates of the Caribbean: At Worlds End* (\$651.6 million in foreign box office revenue), *Pirates of the Caribbean: Dead Man's Chest* (\$643 million in foreign box office revenue), *Harry Potter and the Order of the Phoenix* (\$646 million in foreign box office revenue), and *Spider-Man 3* (\$554 million in foreign box office revenue). The sequel appears to be a major player in the current world of motion pictures.

The variable CRITIC is the percent approval rating for a film by a leading group of movie reviewers. Conventional wisdom suggests that critical reviews are extremely important to the popularity of movies, especially in the early stages of a release. Good reviews are expected to stir curiosity and identify quality, while poor reviews are expected to limit the interest of the influential early adopters. More practically speaking, the advertising agency will select favorable excerpts from reviews and incorporate them in its media campaign to give the impression of critical acclaim (Litman, 1983). Empirical evidence supports the positive and significant impact critics have on the box office as a box office predictor or influencer (Litman & Kohl, 1989; Eliashberg & Shugan, 1997; Reinstein & Snyder, 2000; Terry, Butler & De'Armond, 2004; and King, 2007). Surprisingly, the CRITIC variable is positive but not statistically significant in both model specifications. A theoretical explanation for the result is that critics provide a signal in the early stages of a box office release but are insignificant by the time a film enters the foreign market. Although many films receive critical reviews that are positively correlated with foreign box office performance, the correlation is not consistent across all movies. The movies *Milk*, *Children of Men*, *Sicko*, and *Frost/Nixon* all received critical ratings above 90 percent approval but produced less than \$35 million each in foreign box office revenue. Alternatively, the movies *Babylon A.D.*, *Meet the Spartans*, *Norbit*, *Date Movie*, and *The Number 23* are movies with critical approval ratings below 10 percent but foreign box office revenue greater than \$35 million.

The independent variable AWARD measures the impact of an Academy Award win on foreign box office success. The result indicates the variable is positive and statistically significant determinant of foreign box office revenue. Thirty-two of the films in the research sample received one or more academy award nominations. *Slumdog Millionaire* (\$202 million in foreign box office revenue) earned the most Academy Awards in the research sample with eight, followed by *The Departed* (\$158 million in foreign box office revenue) and *No Country for Old Men* (\$60 million in foreign box office revenue) with four. It is widely believed that films that receive an Academy Award possess what Rosen (1981) describes as the elusive quality of box office appeal, the ability to attract an audience and generate a large volume of transactions. An Academy Award serves as a signaling device, indicating which films are viewed by industry experts as being worthy of special recognition. According to the model,

every Academy Award adds approximately \$10 million per win. Given the financial return for Academy Award wins, it is not surprising that most major movie distributors spend a significant amount on campaigning efforts designed to court the favor of members of the Academy. The variable Academy Award nomination was also explored in a preliminary model specification but the correlation between Academy Award nominations and Academy Award wins was too high to specify a model with both variables.

The last variable in the model is BUDGET. The BUDGET variable is a positive and statistically significant determinant of foreign box office revenue. Big budget movies with high profile movie stars, brand name directors, expensive special effects, and large advertising budgets have an obvious advantage drawing crowds at the box office. Some big budget movies in the research sample include Spider-Man 3 (\$285 million budget, \$554 million in foreign box office revenue), Quantum of Solace (\$230 million budget, \$408 million in foreign box office revenue), and The Golden Compass (\$205 million budget, \$302 million in foreign box office revenue).

Conclusion

The foreign box office is an important source of income to the movie industry as a vehicle for extending profits or minimizing losses. This study examines the determinants of foreign box office revenue for the years 2006-2008. The most important result of the study is the observation that U.S. domestic box office serves as a statistically significant predictor of foreign box office success. The extremely strong relationship between the domestic box office and foreign box office might simply imply domestic performance is a quality signal to the foreign market. On the other hand, the domestic and foreign market correlation might also be explained by the cultural blending across countries creating common interest and preferences. The empirical results also indicate a strong foreign demand for action movies and children's movies, which earn an extra \$15 million to \$26 million premium for the favored genres in foreign box office revenue. Movie sequels are shown to have a positive and statistically significant impact on foreign box office performance. Holding other factors constant, sequels earn approximately \$31 million to \$36 million more than other movies. One of the more interesting results is the positive and statistically significant impact an Academy Award win has on the financial performance of a film. Each Academy Award win is estimated to increase foreign box office revenue by approximately \$10 million. Production budget is also identified as a significant determinant of foreign box office performance, while movie critics and movies with a restricted rating are not statistically significant. One avenue for future research extending the exploration of the foreign box office is to compare financial performance of English language versus alternative language movies in multiple countries where English is not the primary language.

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