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# Say Goodbye to Hollywood: The Performance Discrepancy of Franchise Films between the Domestic and Foreign Box Office

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**CLAREMONT MCKENNA COLLEGE**

**Say Goodbye to Hollywood: The Performance Discrepancy of Franchise Films  
between the Domestic and Foreign Box Office**

SUBMITTED TO

PROFESSOR DARREN FILSON

AND

DEAN NICHOLAS WARNER

BY

JAMES H. HAVLICEK

for

SENIOR THESIS

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## Table of Contents

I.	Acknowledgements.....	3
II.	Abstract.....	4
III.	Introduction.....	5
IV.	Literature Review.....	8
V.	Hypothesis Development.....	12
VI.	Data & Methodology.....	15
VII.	Results.....	20
VIII.	Discussion.....	33
IX.	Conclusion.....	35
X.	References.....	34
XI.	Appendix.....	35

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I would first like to thank Professor Darren Filson, for agreeing to serve as my reader upon meeting me for the first time. It seems true film buffs can recognize one another. I would not have been able to complete this study without his patience and wide-ranging expertise. I would also like to thank Professor Weidenmier for his guidance.

To Dad: I've finally made them an offer they can't refuse.

To Mom: At least I've done something mildly constructive with all of those hours wasted in front of the tube...

To Victoria: It's still baffling to me that *Wayne's World 2* wasn't released overseas, thus disqualifying the franchise from this study (which I admit is both bogus and sad...)

To Kari: You are the Pam to my Jim. And, I can't thank you enough for having a room right above Ryal.

## **Abstract**

The increasing globalization of entertainment appears to be having a major impact on the dynamics of the American film industry. The U.S. box office is no longer predominant, meaning that in order to most effectively capitalize on the state of the theatrical market, domestic studios must now more heavily incorporate foreign preferences into production strategy. This study explores the financial nuances of the global box office in relation to sequel-driven film franchises, which have seemingly come to dominate commercial filmmaking as a result of their risk-minimized profitability. We focus on discrepancies between foreign and domestic performance in order to analyze the potential motivations behind the shifts in Hollywood's output. Using OLS and Probit regression models with a variety of dependent and independent variables, this study finds that sequels tend to perform both relatively and absolutely better overseas, that certain genres are received differently abroad than in the U.S., and that the approval of latter sequels tends to be driven more by foreign revenue generated by previous films within franchises.

## I. Introduction

Discrepancies in global film performance can have significant implications for Hollywood, especially as the size of the foreign box office continues to outgrow the domestic. As of 2013, foreign moviegoers provided approximately 70% of global theatrical box office revenues, up from 64% in 2009.<sup>1</sup> Attendance at American theaters peaked in 2002 with 1.58 billion tickets sold and has been in decline ever since, with 1.28 billion tickets sold in 2011.<sup>2</sup> Cultural variation across the world can create differences in cinematic preferences, suggesting that in order for Hollywood to remain as profitable as it has been in the past, studios will be forced to cater films to a global audience.

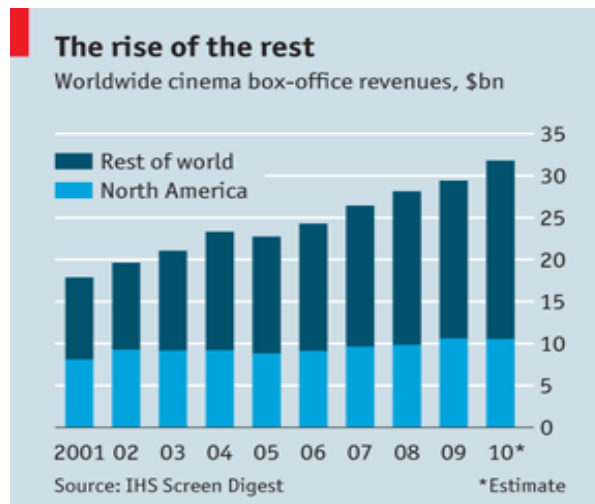
Of particular interest are film franchises, which consist of two or more installments of a particular body of work, and which can ultimately act as a tool to mitigate the risks associated with cinematic releases. Domestic reception is unpredictable enough, yet with an increasingly foreign and unfamiliar audience base, expected box office performance is left swimming in even less familiar waters. If a given film finds universal success, studios can attempt to cash in by mimicking this formula for as long as it remains sufficiently profitable. However, being sufficiently profitable by today's standards implies capturing the attention of the foreign audience. As noted in *The Economist*, what we are seeing is "a cinema boom in the emerging world, a concerted effort by the major studios to make films that might play well outside America and a global marketing push to make sure they do."<sup>3</sup>

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<sup>1</sup> *Theatrical Market Statistics: 2013*. N.p.: Motion Picture Association of America, 2013.

<sup>2</sup> Moreshead, Colin. "Hollywood Is Now Making Films For Foreign Markets, And Their Taste In Movies Is Awful." *Business Insider*, September 18, 2012.

<sup>3</sup> "Bigger Abroad." *The Economist*, February 17, 2011.



Though they are by no means a novelty, franchises now appear to dominate the commercial theatrical sphere; of the ten highest grossing films of 2013, six were sequels and two were reboots of previous films.<sup>4</sup> In the past, Hollywood might have been more likely to cut its losses upon a franchise’s domestic loss of steam. However, given the growing dominance of the foreign box office, this no longer seems to be the case. If a film finds success in the international market, regardless of whether or not it performs well domestically, it is now highly likely that subsequent installments will be given the green light. Hence, despite progressively weakening domestic performance in terms of both financial and critical success, additional sequels have been approved in the likes of *Die Hard 6*, *Pirates of the Caribbean 5*, and *Smurfs 3*.

This study will utilize a sample of 336 internationally high-performing films, collectively comprising 113 franchises, in order to explore the financial dynamics of franchise films. We will first use a ratio of foreign to domestic box office revenues to measure the relative performance of these films, followed by individual foreign and

<sup>4</sup> Lumenick, Lou. “Top 10 Grossing Movies of 2013.” *The New York Post*, December 19<sup>th</sup>, 2013. (Top 10: *Iron Man 3*, *Despicable Me 2*, *Hunger Games 2*, *Man of Steel*, *Monsters University*, *Gravity*, *Fast and Furious 6*, *Oz: The Great and Powerful*, *Star Trek 2*, *World War Z*)

domestic box office revenues and rates of return to measure absolute performance. Films will be broken down by genre, franchise, installment number, and year of release, as well as by various interactions of these factors, in order to determine whether they have an impact on performance. Additionally, this study will assess the probability of sequels being produced based on revenue generated by previous installments.

Our results indicate that sequels generally perform both relatively and absolutely better in the foreign box office than in the domestic box office. This varies between films released before and after 2000, and our analysis suggests that this phenomenon has increased in recent years, as the size of the foreign cinematic audience has increased. We find that Action, Fantasy and Animated films tend to perform more strongly abroad, while Comedy and Horror films do not perform as well. Finally, we find that the green-lighting of earlier sequels tend to be driven more by the domestic revenue generated by previous installments, while that of latter sequels tend to be driven more by foreign revenue generated by previous installments.



## **II. Literature Review**

There have been various studies aimed at predicting the determinants of a film's box office success. The performance of film sequels has certainly served as a component of many of these studies; however, not often has it been a study's focal point, nor has it been a topic that has been explored thoroughly within a more contemporary and international framework.

The financial dynamics of sequels, in terms of the incentives that sequels provide to film studios, have been assessed from various angles. The general conclusion has been that sequels act as a safer bet than original films, given the implied success of their parent films, and thus tend to be sufficiently profitable if not necessarily critically acclaimed. In his study "Information, Blockbusters and Stars: A Study of the Film Industry," Ravid (1999) explores the motivation behind the production of film sequels. He argues that the success of a parent film suggests that a sequel should be adequately profitable, but that a tendency to spend more on a sequel's budget can raise the amount of revenue a film must generate in order to cover the financial spread. Empirically, the author finds that sequels tend to receive weaker reviews, use fewer stars, but find marginally higher return on investment, thus performing better on average than the sample's non-sequels.

In their study "Real Options in the Motion Picture Industry," Gong, Van Der Stede and Young (2011) explore strategies adopted by studio executives, as they relate to marketing of original films and investments in sequels. The authors define a real option as one that "allows decision makers to postpone further expenditure commitment until a substantial portion of the uncertainty surrounding the investment has been resolved" (2), and as a result find that studios will invest more in films that they intend to follow with a

sequel. Given what the authors find to be the higher return on investment of sequels, spending larger amounts on parent films can be financially justified. Furthermore, the study shows that studios will tend to spend more on sequels than on non-sequels, given what is perceived to be a lesser risk of failure given the previously established success of the parent film.

As previously mentioned, there is a lack of empirical studies that focus directly on the economic nuances of sequels. Specifically, studies that touch upon the relationship between sequels and box office success tend only to lump sequels into one collective category, failing to take into account details such as sequel genre, time of release, critical reviews, and franchise order. However, one such experiment differs from the standard approach. In their study entitled “Fast and Frequent: Investigating Box Office Revenues of Motion Picture Sequels,” Basuroy and Chatterjee (2008) use a sample of 167 films from 1991-1993 to compare the domestic revenue amassed by sequels with that of their parent films, and test whether or not the time between film release or the number of intervening sequels effects performance. Using weekly domestic box office revenue as a dependent variable, the authors find that sequels outperform their parent films, most notably when released more quickly afterwards, and when there are more intervening sequels beforehand. However, the authors also find that weekly revenues drop faster for sequels than their parents, suggesting expedited satiation.

As it relates to what will be the international component of this study, there have been previous studies that have attempted to measure determinants of a domestically-produced film’s success throughout the global box office. In their study “Culture Matters: Consumer Acceptance of U.S. Films in Foreign Markets,” Craig, Douglas & Greene

(2005) work with a sample of the top 50 U.S. films from 1997-2002. Through the use of several proxy metrics designed to signify levels of ‘Americanization’ (language, income, geography, McDonald’s per capita, etc.), they find that countries with cultures more similar to that of the United States provide audiences that are more receptive to American films. The authors also measure genre effects across foreign countries, and find that action, fantasy, adventure, animated, mystery and horror perform significantly better globally than domestically.

Additionally, in their study “The Economics of American Theatrical Exports,” Jayakar and Waterman (2000) examine the impact that the economic structure of foreign countries has on their consumption of, and demand for, both domestic and foreign films. The authors find that in countries with relatively high consumer spending on films, domestically-produced films make up a relatively large portion of box office revenues. Furthermore, they find that in countries that have higher investments in film, American films comprise a relatively small share of the market. In contrast to Craig, Douglas and Greene, Jayakar and Waterman find no significant impact of a country’s English fluency on its consumption of films produced in the United States.

Another point of interest is the multi-faceted influence that the expansion of the global film market has had on the terrain of domestic filmmaking. In their study entitled “The Changing Role of Hollywood in the Global Movie Market,” McKenzie & Walls (2012), using a sample of approximately 2,000 American films released from 1997-2007, find that Hollywood’s cinematic productions have begun to bend to foreign demand, as the relative size of the U.S. film industry has decreased. Specifically, they find variation in demand for specific film attributes (e.g. genre, sequels, star-factor) between foreign

and domestic markets, as well as shifts in the type of films produced in Hollywood between past and present time periods, and thus assert that Hollywood appears to be attempting to maximize foreign profitability by catering films to a global audience. In regards to sequels, they show that they are more valued in certain markets than in others, finding higher 'sequel multipliers' in Spain, Australia, France, and the United Kingdom than in the United States, and lower sequel multipliers in Germany and Mexico. However, one of the major drawbacks of this study is the narrowness of its international scope. More specifically, by excluding Asian markets such as Japan and China, which serve as two of the largest cinematic markets outside of Hollywood, the study fails to paint an adequate picture. Additionally, as with the vast majority of similar experiments, the authors only skim the surface of sequel specifics.

In summation, the existing literature provides components that will play a crucial role in this study. However, there exists a gap in that nobody has yet combined these various elements on an international scale, thus necessitating a study that will provide a fuller insight into the performance of sequels in domestic versus foreign markets.

### **III. Hypothesis Development**

The phenomenon of stronger sequel performance in the contemporary foreign box office is one that is often discussed, yet that has seemingly not been analyzed in-depth. As a result, this study will aim to do so.

Franchise sequels may perform relatively better in the foreign box office for several reasons. The first relates to marketing. Films produced in the United States, at least historically, have been targeted most directly towards a domestic audience. As a result, the domestic moviegoer might be more likely than his or her foreign counterpart to view earlier franchise films. It may take the release and/or success of earlier installments to signal whether or not particular franchise even appeals to the relatively larger foreign audience, at which point marketing strategy may be influenced: After studios identify locations in which films show strong performance, sequels can be more targeted towards those areas. Furthermore, a sequel has a powerful and pre-existing marketing tool: its predecessor. Fox executive Jim Gianopulos has referred to this phenomenon as a “self-propelling marketing message in a very big world.”<sup>5</sup> As a result, marketing a sequel on a global scale may be less costly, an advantage that has the potential to last the duration of an entire franchise.

Additionally, the domestic audience may reach a saturation point with franchises earlier than foreign audiences, primarily due to differences in cultural taste and preferences. As noted by Ravid (1999), sequels tend to find less critical success domestically than their parent films, meaning that the domestic audience may grow

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<sup>5</sup> Richwine, Lisa. "Summer Movie Sequels Equal Profits for Hollywood Studios." *Reuters*, April 2, 2014.

increasingly dissatisfied with each release. However, this does not necessarily imply that the interest of the foreign audience will wane concurrently. Foreign expectations of American movies are highly likely to differ from domestic expectations (Craig, Douglas & Greene, 2005; McKenzie & Walls, 2012), and it is likely that what motivates Americans to view a particular film is not what motivates a foreigner. As it relates to genre, films containing themes of lesser cultural specificity may be likely to translate more fluidly overseas. As a result, one might expect films more reliant upon universal and visually-driven content, which have come to define a majority of popular franchises, to outperform those whose nuances might resonate more strongly with an American audience.

Other factors that may distinguish the American consumer from his or her foreign counterpart are levels of disposable income and opportunity cost. Faced with falling disposable income, consumers cut spending on nonessential entertainment goods, such as movie tickets.<sup>6</sup> This has been recently accentuated in the United States as a result of the 2008 financial crisis and the economic cutbacks associated with it. It is also plausible to assume that opportunity costs in the United States may be higher than in many other countries, given the variety not only of films released, but also of other recreational activities available to the American public. This may lead to lesser attendance at film sequels of potentially lesser quality than others. Furthermore, the growth of alternative entertainment sources has had a substantial impact on box office revenues, as consumers are able to turn to cheaper and more immediate resources such as downloadable internet content, on-demand and streaming products, and even illegally pirated material.

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<sup>6</sup> "IBISWorld Industry Risk Rating Report 51213: Movie Theaters in the U.S." *IBISWorld*, March 2014.

With these motivations in mind, we present four hypotheses:

**Hypothesis 1:** *With each franchise sequel, the ratio of foreign to domestic box office revenue will increase relative to the original film, indicating that sequels gain relative momentum in the foreign box office and/or lose relative momentum in the domestic box office.*

**Hypothesis 2:** *Foreign box office revenues and rates of return will increase with sequels, while domestic box office revenue and profits will decrease.*

**Hypothesis 3:** *There will be a negative correlation between a film's foreign to domestic revenue ratio and its Rotten Tomatoes rating (a proxy used to measure aggregate critical success), suggesting that films less critically claimed in the U.S. will perform relatively better overseas.*

**Hypothesis 4:** *Franchise films belonging to genres with less cultural specificity and/or more visual appeal will perform relatively better overseas.*

#### IV. Data and Methodology

The sample used in this study consists of films that meet the following criteria: First, they are part of a franchise that consists of at least two installments, all of which have been released globally. Next, the franchises that they comprise have generated at least \$100 million in respective foreign and domestic box office revenue. Though the latter criteria is admittedly somewhat subjective, the authors wanted to focus on films that found a minimum amount of worldwide commercial success, and that were not too heavily skewed towards either the domestic or foreign box office.

Certain difficulties arose in structuring the sample, namely in defining what constitutes a franchise. For example, certain entities have served as the subject of more than one respective film series. This study utilizes a narrow definition of franchises, thus breaking them down specifically. As a result, the following decisions were made: The two franchises focusing on the *Batman* character are separated into the *Batman* franchise (1989-1998) and the *Dark Knight* franchise (2005-2012). *Alien vs. Predator* is considered an individual franchise, as are the respective *Alien* and *Predator* franchises. *Lord of the Rings* and *The Hobbit* are also distinguished. Furthermore, certain franchises were excluded despite technically meeting the aforementioned criteria. Notably, the *James Bond* franchise was omitted, as a result of its unparalleled number of installments which span over 50 years.

With these caveats in mind, our sample consists of 336 films, representing 113 franchises and spanning from 1972-2014. The sample used in this analysis was compiled using guidelines from the website *The Numbers* ([www.the-numbers.com](http://www.the-numbers.com)), which ranks the highest performing franchises by domestic and worldwide totals. Film financial



information, including box office revenue and budget, was compiled using the website *Box Office Mojo* ([www.boxofficemojo.com](http://www.boxofficemojo.com)), a subsidiary of the Internet Movie Database. Critical information was compiled using the website *Rotten Tomatoes* ([www.rottentomatoes.com](http://www.rottentomatoes.com)), which creates aggregate film ratings based on individual critical reviews.

This study will be utilizing several different metrics as dependent variables. The first is what will be referred to as the ‘foreign to domestic ratio,’ which is a film’s foreign box office revenue divided by its domestic box office revenue. The purpose of this metric will be to explore the relationship between the foreign and the domestic market in *relative* terms. Next are respective foreign, domestic and total box office revenues, which will allow us to study the impact of different variables on revenue in *absolute* terms. Because our sample spans over 40 years, these revenue numbers will be adjusted for inflation using calculations involving the CPI (Consumer Price Index), which will allow for more accurate comparisons. To probe even further, this study will use as dependent variables the log of films’ inflation-adjusted budgets and rates of return, which will be defined as a film’s revenues divided by its production budget.<sup>7</sup>

The study’s independent variables will allow us to examine the impact of different factors on domestic and foreign financial performance. Films in our sample will first be broken down by franchise and year of release. In our analyses, franchises will be given numerical identifiers (1 through 113). We will then be able to control for these factors in our analysis, to determine whether particular franchises or years stand out as statistically

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<sup>7</sup> This tactic originates with Ravid (1999), and has become common in econometric film research. It allows one to compare relative profitability within a sample, and is more accurate in if advertising and certain other costs are unknown.

significant in terms of international performance. We will then classify films by their genre, in order to determine whether there are specific types of films that perform differently between the domestic and the foreign box office. The genres represented in our sample are classified as Action (1), Horror (2), Comedy (3), Family (4) Fantasy (5), Animated (6), and Drama (7). As has been suggested in our literature review, cultural discrepancies may likely cause foreign audiences to respond differently to certain films than domestic audiences.

Next, to probe into sequel dynamics, each film will be categorized by its position in its respective franchise. ‘Film 1’ will indicate that a film is a first installment, ‘Film 2’ will indicate that it is a second, and so forth. This will allow us to assess whether or not specific installments perform differently between the domestic and foreign markets. We will then use a film’s Rotten Tomatoes rating (from 0 to 100) to act as a proxy for critical success. This study will also divide analyses by different time periods, specifically pre-2000 and 2000 to present. The aim of this division is to determine whether or not international franchise dynamics have existed throughout the duration of our sample, and how they may have changed over time.

This study will utilize the following OLS (Ordinary Least Squares) regression models:

$$y_{it} = \alpha + \gamma_i t_i (\text{or } \gamma_t) + \sum_{i=1}^G B_i g_i + \sum_{i=1}^8 \theta_i n_i + \varepsilon_i \quad (1)$$

$$y_{it} = \alpha_f + \gamma_i t_i (\text{or } \gamma_t) + \sum_{i=1}^8 \theta_i n_i + \psi r_i + \varepsilon_i \quad (2)$$

$$y_{it} = \alpha_f + \gamma_i t_i (\text{or } \gamma_t) + \sum_{i=1}^8 \theta_i n_i + \sum_{i=1}^8 \sum_{j=1}^G \varphi_{ij} n_i g_j + \varepsilon_i \quad (3)$$

where  $y_{it}$  will represent our dependent variables, which consist of the following: the ratio of a film's foreign to domestic inflation-adjusted revenue; the logs of a film's respective foreign, domestic, and total inflation-adjusted revenue; the log of a film's respective foreign, domestic, and total inflation-adjusted profit; and the log of a film's inflation-adjusted production budget. Our independent variables are represented as follows: year ( $t_i$ ) / year fixed-effects ( $\gamma_t$ ),<sup>8</sup> franchise fixed-effects ( $\alpha_f$ ), genre ( $g_i$ ), film installment number ( $n_i$ ), Rotten Tomatoes score ( $r_i$ ).

Next, this study will measure the probability that a franchise installment is 'green-lit,' or given the approval for production, based on the performance of previous installments. For this, our study will employ a Probit model. Our respective dependent variables will consist of binaries denoting whether or not a particular installment is green-lit. Our independent variables in these regressions will consist of revenue generated by a film's previous installments in the foreign and domestic markets, as well as genre, year, and the previous film's Rotten Tomatoes score.

Our probit model is as follows:

$$\Pr(y_{green-lit} = 1|X) = \alpha + \sum_{i=1}^{42} \gamma_i t_i \text{ (or } \gamma_t) + \sum_{i=1}^G B_i g_i + \rho D_{i-1} + \sigma F_{i-1} + \psi r_{i-1} \quad (4)$$

where  $\Pr(y_i = 1|X)$  represents the probability that a given installment is given the green light for production. Our independent variables are as follows: year ( $\sum_{i=1}^{42} \gamma_i t_i$ ) or year fixed effects ( $\gamma_t$ ), genre ( $g_i$ ), log of inflation-adjusted domestic revenue generated by a franchise's previous installment ( $D_{i-1}$ ), log of inflation-adjusted foreign

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<sup>8</sup> When conducting our regressions, we will first test for a time trend. If none exists, we will implement year fixed effects.

revenue generated by a franchise's previous installment ( $F_{i-1}$ ), and the Rotten Tomatoes score of a franchise's previous installment ( $r_{i-1}$ ).

Finally, we will provide preliminary results from a Heckman Selection Model to account for selection bias in our sample. This model accounts for the fact that making a sequel is endogenous, combining a probit equation with an outcome equation and applying to a particular sequel. Because all franchises in our sample have at least two installments, the model will apply only to third installments and forward. Samples for these models will vary based on the specific installments being analyzed; the sample used to measure third installments will be the collective sample, the sample used to measure fourth installments will consist of only of third and fourth installments, etc.

## V. Results

Table 1 presents the 336 films, representing 113 film franchises and spanning from 1972 to 2014, that comprise our sample. Each franchise is labeled by its numerical identifier (1 through 113).

Table 2 presents the summary statistics for the independent variables used in our analysis. We see that, adjusted for inflation, average foreign box office revenue exceeds domestic average domestic box office revenue (\$270 million vs. \$208 million).

Furthermore, we see that the average ratio of foreign to domestic box office indicates that the average franchise film generates 143% more revenue overseas. In terms of genre, Action is the most frequent with 138 films, followed by Comedy (59), Fantasy (44), Animated (32), Horror (31), Drama (19) and Family (13). The genre with the highest average foreign to domestic ratio is Animated (1.86), followed by Drama (1.75), Fantasy (1.71), Action (1.42), Comedy (1.18), Horror (1.15) and Family (0.87). The genre with the highest average inflation-adjusted box office revenue is Fantasy (\$877 million), followed by Animated (\$628 million), Action (\$451 million), Drama (\$443 million), Comedy (\$353 million), Horror (\$246 million) and Family (\$235 million).

### **The Genre Regressions (Table 3)**

For our first regression, we use the ratio of foreign to domestic box office revenue as our dependent variable, while controlling for year, installment number and genre. We see that the coefficient for our year variable is positive and significant at the 1% level, suggesting that with every one-year increase across our sample, which spans from 1972 to 2014, the foreign to domestic ratio increases by roughly 2 percentage points. We also

see an upward and increasing trend in the foreign to domestic ratio from second through fifth franchise installments. Second installments show a 30 percentage point increase over parent films, and fifth installments show an 87 percentage point increase. This growth withers with sixth installments, which appear to generate 38 percentage points more foreign revenue than parent films, but picks back up with seventh and eighth installments (although the sample of sixth through eighth films is admittedly too small to be conclusive, given that is quite rare for a franchise to extend this far).

In terms of genre, our omitted category is Action, meaning all other genres are being measured relative to these films. We see that Fantasy, Animated, and Drama<sup>9</sup> films outperform Action in terms of the foreign to domestic ratio. These films, on average, are associated with increases in the foreign to domestic ratio of 21 percentage points, 38 percentage points and 44 percentage points respectively. Horror and Family perform relatively worse than Action, associated with decreases in the foreign to domestic ratio by roughly 39 percentage points and 43 percentage points respectively. The coefficient on Comedy appears to be negative, yet statistically insignificant. Our R-Squared coefficient is roughly .30, suggesting that these independent variables only explain 30% of variation in the foreign to domestic ratio.

When narrowing the time windows of our regression, the results shift. Pre-2000, we see that the coefficient for our year variable increases slightly, yet its significance drops to the 5% level. We also see that the genre and sequel effects weaken. On a statistically significant level, only third installments outperform their parent films in terms of the foreign to domestic ratio, on average associated with a 45 percentage point

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<sup>9</sup> It is worth noting that our sample contains 19 Drama films across 5 franchises, and that it is an eclectic range of content. Drama franchises are less common, and the genre can be quite diverse.

increase. Though fifth installments also show growth, there is only one fifth installment in this particular subgroup (*Rocky V*). In terms of genre, we see that Comedy and Animated films perform significantly weaker than action films, while other genres are insignificant. When switching the time frame to the post-2000 era, the so-called sequel effects return. We see that there is once again a positive and increasing foreign to domestic ratio with the release of each franchise installment, up until the sixth film. Second installments show a 33 percentage point increase, which steadily grows until fifth installments, which show an 84 percentage point increase. Genre effects stay generally the same as in the overall sample, with the exception of the Drama coefficient becoming insignificant.

Next, we regress both adjusted foreign and domestic box office revenue on the same independent variables for the collective sample. This gives a more absolute measure of film performance, which we can then compare across the two markets. Our variable for year becomes negatively significant, suggesting that for every one-year increase in our sample, adjusted foreign box office revenue decreases by 2%. In terms of installments, we find the following statistically significant results: Relative to first installments, third installments are associated with a 19% increase in foreign revenue, fourth installments with a 24% increase, seventh installments with a 52% increase, and our eighth installment with a 110% increase.<sup>10</sup> In terms of genre (again relative to Action, our omitted variable), we see that Horror, Comedy and Family perform significantly worse, while Animated and Fantasy perform better.

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<sup>10</sup> Note: Our sample only contains one eighth installment, in the globally lucrative *Harry Potter* franchise, and two seventh installments, in the *Saw* franchise and again in *Harry Potter*

When we compare these figures to the domestic box office, we find significant differences. The coefficient for the year variable is even more negatively significant, suggesting that with each one-year increase, adjusted domestic box office revenue decreases by 3%. In terms of installments, we find that the only significance is negative, meaning that in contrast to the foreign box office, domestic revenue decreases with sequels. Second installments are associated with an 18% drop, fourth installments with a 23% drop, and fifth installments with a 32% drop. The direction and significance of the genre effects stay largely the same, yet the coefficients differ. More specifically, Horror and Family films also decrease domestic revenue, while Fantasy and Animated increase it, yet all of these changes occur to a lesser extent. The coefficient of Drama becomes negatively significant, and Comedy films show no significance.

Pre-2000, sequel effects essentially disappear in the foreign revenue regression. Horror and Fantasy are the only significant coefficients, the former being negative and the latter positive. Our year variable is negative and insignificant, leading us to instead implement year fixed-effects. In the pre-2000 domestic revenue regression, year becomes negative and highly significant, suggesting that domestic revenue drops by roughly 5% with each year prior to the turn of the century. The coefficient on all installments is negative, yet only third and fifth installments are significant. Fantasy and Animated are also the only genres that seem to outperform action. Post-2000, we see that third, sixth, seventh and eighth installments increase foreign revenue. Horror, Family, Comedy and Drama decrease it relative to Action, while again Fantasy and Animated increase it. In the domestic regression, the coefficient on year becomes negative and significant, again suggesting that domestic revenue generated by franchise films is decreasing with time.



Second installments appear to significantly drop domestic revenue by 19%. In terms of genre, Horror, Family and Drama decrease domestic revenue significantly, yet much less so than in the foreign regression. Fantasy and Animated increase domestic revenue, though also much less so than in the foreign regression.

In Table 4, when using the log of adjusted production budget as our dependent, we find that the coefficients increase at a significant level from second through fourth installments, tapering at fifth and picking back up with sixth through eighth installments. Furthermore, we see that the budgets of Horror, Comedy, Family and Drama films are significantly less than those of Action films, and that those of Fantasy are higher. Animated appears to be insignificant. Of note in the Genre Profit regressions is that coefficients of Horror films, which were negatively correlated with box office revenues across the board, become highly positive and significant. This can perhaps be attributed to the lower budgets generally associated with the production of this category of film. Furthermore, we see intensified negative effects in profit, particularly in the domestic regressions. These are most pronounced pre-2000, which mostly subsides post-2000 in the foreign regression, yet does not in the domestic. This may be indicative of a growing profitability in the foreign market that is not necessarily present domestically.

### ***The Franchise Regressions (Tables 5 & 6)***

For our next regression, we control for year, installment number, franchise, and domestic critical reception. In terms of installments, once again the ratio of foreign to domestic box office revenue grows larger with each franchise sequel, yet to a somewhat lesser extent. This trend begins with second franchise installments and continues fifth, at

which point this growth stalls. Furthermore, our Rotten Tomatoes variable is negative and statistically significant, suggesting that critical score drops slightly with each increase in the foreign to domestic ratio. We also see a significantly higher R-squared coefficient of .85, indicating that controlling for specific franchises helps to explain far more variation in the foreign to domestic box office ratio. This is to be expected, as each film franchise represents an individual product with unique features such as personnel, source material and marketing strategy.

Of the 113 franchises in our sample, only five appear to be positively significant, meaning that they performed notably better in terms of the foreign to domestic ratio: *Zorro*, *The Smurfs*, *Kung-Fu Panda*, *Ice Age*, and *Bridget Jones' Diary*. Of these, three are Animated, one is Action, and the other is a comedy based upon British source material. On the other hand, twenty-two franchises appear to be negatively significant. Of these franchises, nine are comedy (*Ace Ventura*, *Analyze This*, *Austin Powers*, *Big Momma's House*, *Cheaper by the Dozen*, *Grown Ups*, *Rush Hour* and *Scary Movie*) two are family (*Spy Kids* and *The Santa Clause*) four are horror (*Insidious*, *Scream*, *Saw*, and *Paranormal Activity*), one is fantasy (*Twilight*), and six are action (*Hunger Games*, *Riddick*, *Star Trek*, *Taken*, *Underworld*, and *X-Men*).

Pre-2000, the effects we observed based on installment number disappear, with the exception of third films, which increase the ratio by 78 percentage points relative to first installments. Franchises that stand out as positively significant are *Basic Instinct*, *Hot Shots*, *Rambo*, *Speed* and *Zorro*, and the only franchise that stands out as negatively significant is *Austin Powers*. For our next window, from 2000 to present, the sequel installment effects return in increasing fashion. Second installments are associated with,

on average, a 17 percentage point increase in the foreign to domestic ratio, up through fifth installments, which are associated with a 70 percentage point increase. Sixth installments drop slightly, with a 59 percentage point increase, but this is still a larger increase than installments two through four. Seventh and eighth installments do not appear to be statistically significant.

Next, we again regress both foreign and domestic box office revenue on the same variables. We see that in the overall sample, there is an upward trend in coefficients from second through fourth films. The coefficient on fifth films is slightly less than fourth, yet still greater than installments two and three. When contrasted with domestic box office revenue, it appears that no installments are statistically significant. For the most part, there is a fair amount of overlap with the foreign regression in terms of individual franchises that have a positively significant effect on revenue. These generally consist of big-budget Action, Fantasy and Animated films. Franchises that are positively significant and that were not significant in the foreign regression are *Rush Hour*, *Bruce/Evan Almighty*, *Cheaper by the Dozen*, *Cars*, and *Rush Hour*, representing four Comedy and one Animated franchise. Franchises that were negatively significant in the foreign regression that do not appear in the domestic are skewed towards Comedy, Family and Horror films, including *Big Momma's House*, *Analyze This/That*, *The Santa Clause*, and *Paranormal Activity*. Domestic revenue stays insignificant both pre and post-2000, while foreign effects vanish pre and reappear post-2000. Furthermore, we see a statistically significant negative correlation on our post-2000 domestic year coefficient, which does not occur in the foreign regression. Effects in our total revenue regression seem to mirror

those in the foreign regression, suggesting the predominant impact of foreign over domestic revenue.

Of note in our next table, which displays the results of our profit regression, is that budgets rise substantially with each sequel, and that there is no statistical significance in foreign sequel profit. On the other hand, though there was little significance in terms of domestic revenue in our previous regressions, domestic profits appear to decrease gradually, at a statistically significant level, with each franchise installment. This trend appears even more strongly in the pre and post-2000 windows. Total profits, notably post-2000, display a downward trend with each franchise installment. This data suggests that higher budgets and costs associated with sequels cut heavily into profit.

### **The Interaction Regressions (Tables 7-9)**

For our final OLS regressions, we interact our installment number variable with our genre variable, in order to measure the performance of sequels within specific subcategories. We exclude franchise fixed effects in our first regressions, and then include them in our second. Because Action is our excluded genre, our base installment variables (Film 2 - Film 8) can be interpreted as the effects of Action sequels, as well as the base coefficients of our interaction terms.

Franchise Fixed Effects Excluded: In terms of first installments, Fantasy films appear to lead to a higher foreign to domestic ratio than Action, while Horror films display a significant negative coefficient. These are the only genres of statistical significance. Our base installment variables show growth: The coefficient for second installments is positive and not statistically significant, but there is significant upward

growth from third through fifth installments, after which point the coefficient drops yet still exceeds those of third and fourth installments. These variables also account for movements related to Action sequels, given that it is our omitted genre. Fantasy films show upward movement relative to their Action counterparts in first and second installments, from 25 to 45 percentage points, after which the coefficients become insignificant. Second and fourth Animated installments also display upward movement relative to their Action counterparts, from 70 to 142 percentage points.

Horror films show downward movement in coefficients from first through third installments, which fizzles and then resurges with sixth installments. Additively, however, sixth Horror installments result in an increase in the Foreign to Domestic ratio relative to first Action films. Comedy is insignificant until third installments, which display a significant coefficient of -51 percentage points (although additively signifying a slight increase over first Action installments), and fifth installments, which display a significant coefficient of -163 percentage points. Family coefficients are negative yet insignificant until third and fourth installments, showing coefficients of -128 and -74 percentage points (an additive increase over first Action installments) respectively. These observations are consistent with our initial genre observations, which suggested that Fantasy and Animated films tend to outperform Action in the foreign to domestic ratio, while Horror and Family perform worse. Pre-2000, the only base (Action) coefficient of significance is fifth installments, which shows a 64 percentage point increase over original films. First Comedy and Animated installments also become negatively significant, yet sequels in these genres show no significance. Post-2000, the effects of the collective regression are essentially mirrored, yet intensified.

In our foreign revenue regression, coefficients increase with each base installment after second. This is not the case in the domestic revenue regression, where coefficients are negative and insignificant until our sparse sixth through eighth installments. Genre effects are fairly similar across sequel performance, yet coefficients are intensified in the foreign regression.

*Franchise Fixed Effects Included:* It is interesting to note the changes in genre and sequel effects between our Interaction regressions. This can be attributed to the fact that the latter accounts for franchise fixed effects, which significantly raises our R-squared and controls for the unique impacts of specific film groups on our dependent variables. We excluded franchise fixed effects in our first regression for the purposes of a broader analysis, despite it making for a technically weaker and less explanatory model.

We see that as it relates to first installments, Fantasy is the highest performing genre in terms of the foreign to domestic ratio, followed by Drama, Comedy and Action. Horror and Family are positive but insignificant, and Animated is the only variable with a significant negative coefficient. In terms of subsequent installments, Fantasy and Drama sequels all show strong and significant growth, which tapers with fifth installments. Action sequels show statistically significant upward growth of lesser magnitude in the foreign to domestic revenue ratio, yet this growth remains more consistent through all installments, suggested by the trend from a 22 percentage point increase with second installments to a 177 percentage point increase with six installments. Comedy displays growth through second installments, at which point significance wanes. Family sequels initially show no significant movement, yet display negative significance with third installments, suggesting weaker foreign to domestic performance than other third sequels

yet higher than original action installments. Horror installments show little to no significance. Finally, we see a negative and highly significant coefficient on our Rotten Tomatoes variable, indicating that for each increase in the Foreign to Domestic ratio, critical score drops slightly. Pre-2000, significance becomes quite sparse, and the sequel and critical effects of the collective sample mostly dissipate. Post-2000, the first point of interest is that the Year variable becomes positive and significant, suggesting that the foreign to domestic ratio increases on average by 6 percentage points with each passing year. Beyond this, effects are similar to those displayed within the collective sample.

We run the same regressions with the logs of foreign, domestic and total box office revenues as the dependent variables. In all of these regressions, for the overall sample, our year variable is negative and significant, suggesting a shrinking of box office revenues across all markets. In relation to installment effects, there are substantial discrepancies. In terms of foreign revenue, our original Drama films are the most positively correlated, followed by Comedy, Horror, Fantasy and Family. Original Animated films appear to be barely positive and insignificant. Domestically, the most significant increases are associated with Comedy films, followed by Family, Drama and Horror. In terms of sequels, Action shows increasing foreign revenue with each installment, growing from 23% with second installments to 160% with sixth installments. On the other hand, no consistent increases or significance are seen in the domestic regression. In both the domestic and foreign regressions, the coefficients for Comedy grow strongly with each installment. Family, which is the second weakest performing of the genres in terms of first installments in the foreign box office, loses its significance with its subsequent releases, while it remains positive and significant in the domestic

equation. Animated shows significance in neither the domestic nor the foreign equation. Fantasy grows but tapers after second installments in terms of foreign revenue, while remaining insignificant on the domestic side. Drama sequel coefficients grow in the foreign equation through fourth installments, yet display no significance domestically. Finally, Horror shows little impact on foreign revenue, yet its coefficients grow slightly through second installments in the domestic market.

In our Interaction Profit Regression, it appears that domestic profit becomes increasingly negative and significant from second through fourth installments, while foreign profit is initially insignificant yet becomes positively significant and growing from fifth installments onwards. This would suggest that foreign revenue is more responsible for covering the financial spread created by production budgets, which would help to explain why we see franchises that are relatively unsuccessful in the U.S. being continued.

### **Green-Light Probits (Tables 10 & 11)**

As far as installments that are currently in production (represented by the variable GLitCurr in Table 6), we see that these have been driven primarily by the amount of foreign box office revenue generated by the previous franchise installment. On the other hand, there is a strong negative relationship between green-lighting and the domestic box office revenue generated by the previous franchise installment.

Dependent variables GLit3 through GLit7, also in Table 6, are binaries that denote whether or not particular franchise installments have been green-lit. The number in the variable name specifies the particular installment (e.g. GLit3 measures whether or



not a third installment has been approved; GLit4 measures the same for a fourth installment, etc.).<sup>11</sup> We find that the approval of a third installment is driven significantly by the domestic box office revenue generated by a franchise's second installment. On the other hand, we see a negative yet insignificant relationship between foreign revenue and the approval of a third installment. Then, it appears that the results switch; the approvals of fourth and fifth installments are driven significantly by foreign box office revenue generated by direct predecessors, while there is a statistically insignificant negative correlation with the domestic box office revenue generated by predecessors. Furthermore, there is an increasingly negative correlation between the green-lighting of third, fourth, fifth and seventh installments and the Rotten Tomatoes score of the previous film.

In Table 10, in which we control for time periods, we see that significance again fades prior to 2000. Then, post-2000, we see somewhat of a return of the revenue effects from the collective sample. Approval of third installments appears to be driven by domestic revenue, and in fifth and seventh installments we see a positive and significant coefficient for foreign revenue with a negative and significant coefficient for domestic revenue.

### **Heckman Selection Model (Table 12)**

Table 12 presents the preliminary results from our Heckman Selection Model, which begins the important task of accounting for selection bias within our sample. Subsequent work will develop the model further.

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<sup>11</sup> The green-lighting binary will only apply to third installments and beyond, as all franchises in our sample contain at least two films

## VI. Discussion:

The results found in our study suggest that the film industry will likely continue to adapt to an increasingly globalized market by producing films that appeal to the foreign audience as much as the domestic. Franchise films, especially those of certain genres, appear to be highly lucrative products in this regard. As a result, we may see increasing numbers of sequels, ones that may be highly profitable overseas but that may not find similar success domestically. The traditional trilogy model may now be a thing of the past, given the demonstrated success of later installments. Though this may seem to be a red flag to those concerned with the artistic integrity of the film industry, it does not necessarily imply that the cinema of the future will be fundamentally altered.

Entertainment is and has always been a business, and increasing foreign profit may allow studios the flexibility to continue to produce high quality, domestically appealing films in other areas. Though it may seem somewhat extreme from our current perspective, it isn't implausible to imagine that studios may divide their operations to the point of producing certain films that are marketed exclusively towards the foreign audience, and vice versa.

*Limitations:* It is important to acknowledge that this study is not without its limitations. For one, each film, let alone each franchise, represents an undeniably unique product, one with its own marketing strategy, source material, etc. As a result, it can be difficult to compare these franchises and draw broad conclusions about them. It is also important to account for potential survivorship bias within our analysis. Additionally, certain franchises in our sample may span longer than others for unique reasons, such as an initial agreement to produce a certain number of films, perhaps based on the span of a particular source material. This would be the case with popular literary series such as

*Harry Potter* and *Lord of the Rings*. Furthermore, it will be important to further control for selection/survivorship bias within the sample, meaning that certain films may be produced for specific reasons that do not apply to other films, and that may also impact box office performance.

Our sample also lacks an adequate number of observations in certain areas, which makes it difficult to draw valid conclusions in said areas. For example, the number of films thins progressively as we go deeper into the order of franchise installments. Only 21 films of 336 in our sample represent fifth through eighth installments. This is somewhat unavoidable, as most franchises have not yet or will never span this far, and it is still important to take these later installments into account. Furthermore, it can be difficult to classify films by specific genres, as there is often overlap in terms of content. If one were to classify certain films by other genres, this would potentially alter this study's results. Our sample also contains only 19 Drama and 13 Family films, making them the least represented genres. Certain franchises also cross the pre and post-2000 time frames, making it difficult to measure those effects. Finally, the lack of data available on precise film budgets and the amount of foreign film screens upon which specific films are released on is a drawback.

## **VII. Conclusion**

The goal of this study was to investigate the financial dynamics of franchise films across the global box office, focusing on the discrepancies in performance between the domestic and foreign markets. The increasing predominance of theatrical revenues generated overseas seems to have had a significant impact on the direction of commercial filmmaking in the U.S., and our aim was to quantitatively analyze the reasons behind this shift.

Our results indicate that sequels generally perform both relatively and absolutely better in the foreign box office than in the domestic. This is more pronounced post-2000, which is likely a combination of continuing growth in foreign audiences and increases in overseas targeting by American film studios. We also find that the green-lighting of earlier sequels tends to be driven more by domestic performance, while that of later sequels tends to be driven more by foreign performance. We initially find that Action, Fantasy and Animated sequels outperform Horror, Family and Comedy sequels in the foreign box office, yet this is altered upon controlling for franchise fixed effects.

## VIII. References

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**Table 1: Franchises**

<p>300-101  <i>Ace Ventura</i>-3  <i>Alien</i>-4  <i>Back to the Future</i>-32  <i>Bruce Almighty</i>-5  <i>Alvin and the Chipmunks</i>-6  <i>Analyze This</i>-7  <i>American Pie</i>-1  <i>Austin Powers</i>-8  <i>Alien V. Predator</i>-2  <i>Bad Boys</i>-10  <i>Basic Instinct</i>-11  <i>Batman</i>-12  <i>Beverly Hills Cop</i>-9  <i>Big Momma's House</i>-13  <i>Blade</i>-14  <i>Bourne</i>-15  <i>Bridget Jones' Diary</i>-16  <i>Cars</i>-17  <i>Cats and Dogs</i>-18  <i>Charlie's Angels</i>-19  <i>Cheaper by the Dozen</i>-20  <i>Cloudy w/ Meatball</i>-21  <i>Miss Congeniality</i>-22  <i>Crocodile Dundee</i>-23  <i>101 Dalmatians</i>-25  <i>Dark Knight (Nolan)</i>-26  <i>Despicable Me</i>-27  <i>Die Hard</i>-24  <i>Expendables</i>-28  <i>Fantastic Four</i>-31  <i>Final Destination</i>-29  <i>Fast and the Furious</i>-30  <i>Garfield</i>-34  <i>Ghost Rider</i>-35  <i>Ghostbusters</i>-36  <i>GI Joe</i>-33  <i>The Godfather</i>-37  <i>Grown Ups</i>-38  <i>The Grudge</i>-39  <i>The Hangover</i>-41  <i>Hannibal Lecter</i>-42  <i>Hellboy</i>-43  <i>The Hobbit</i>-44  <i>Home Alone</i>-45  <i>Hot Shots</i>-46  <i>Harry Potter</i>-40</p>	<p><i>Hunger Games</i>-47  <i>Ice Age</i>-49  <i>Iron Man</i>-48  <i>Indiana Jones</i>-50  <i>Insidious</i>-51  <i>Jaws</i>-52  <i>Journey to Center of Earth</i>-53  <i>Jurassic Park</i>-54  <i>Kill Bill</i>-55  <i>Kung Fu Panda</i>-71  <i>Lethal Weapon</i>-57  <i>Lord of the Rings</i>-56  <i>Madagascar</i>-60  <i>The Matrix</i>-61  <i>Mission Impossible</i>-58  <i>Men in Black</i>-59  <i>Monsters Inc.</i>-62  <i>Mummy</i>-63  <i>Night at the Museum</i>-64  <i>Chronicles of Narnia</i>-65  <i>National Treasure</i>-66  <i>Nutty Professor</i>-67  <i>Ocean's Trilogy</i>-68  <i>Paranormal Activity</i>-69  <i>Meet the Parents</i>-72  <i>Percy Jackson</i>-73  <i>Pink Panther</i>-74  <i>Pirates of the Caribbean</i>-70  <i>Predator</i>-75  <i>Rambo</i>-76  <i>Resident Evil</i>-77  <i>Riddick</i>-78  <i>The Ring</i>-79  <i>Rocky</i>-80  <i>Rush Hour</i>-81  <i>The Santa Clause</i>-82  <i>Saw</i>-83  <i>Scary Movie</i>-84  <i>Scooby Doo</i>-85  <i>Scream</i>-86  <i>Sex and the City</i>-87  <i>Sherlock Holmes</i>-88  <i>Shrek</i>-89  <i>Smurfs</i>-90  <i>Speed</i>-91  <i>Spider-Man</i>-92  <i>Spy Kids</i>-93</p>	<p><i>Star Trek</i>-94  <i>Star Wars</i>-95  <i>Step Up</i>-96  <i>Stuart Little</i>-97  <i>Taken</i>-98  <i>Terminator</i>-99  <i>Thor</i>-100  <i>Titans</i>-102  <i>Tomb Raider</i>-103  <i>Toy Story</i>-104  <i>Transformers</i>-105  <i>Transporter</i>-106  <i>Twilight</i>-107  <i>Under Siege</i>-108  <i>Underworld</i>-109  <i>X Files</i>-110  <i>X Men</i>-111  <i>XXX</i>-112  <i>Zorro</i>-113</p>
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**Table 2: Summary Statistics**

Variable	Obs	Mean	St Dev	Min	Max
Year	336	2003	9	1972	2014
Domestic BO revenue	336	\$152,000,000	\$103,000,000	\$5,971,336	\$535,000,000
Foreign BO Revenue	336	\$210,000,000	\$180,000,000	\$13,800,000	\$961,000,000
Total BO Revenue	336	\$362,000,000	\$268,000,000	\$38,600,000	\$1,340,000,000
Adjusted Domestic BO revenue (Dom Rev)	336	\$208,000,000	\$173,000,000	\$6,984,331	\$1,790,000,000
Adjusted Foreign BO Revenue (For Rev)	336	\$270,000,000	\$217,000,000	\$19,100,000	\$1,220,000,000
Adjusted Total BO Revenue (Tot Rev)	336	\$478,000,000	\$364,000,000	\$45,200,000	\$3,020,000,000
Foreign: Domestic Revenue (FD)	336	1.43	0.78	0.22	5.53
Rotten Tomatoes Score (RT)	336	54.00	26.85	0.00	100.00
Adjusted Domestic BO Revenue (Previous)	223	\$241,000,000	\$189,000,000	\$30,400,000	\$1,790,000,000
Adjusted Foreign BO Revenue (Previous)	223	\$280,000,000	\$214,000,000	\$19,100,000	\$1,220,000,000
Adjusted Total BO Revenue (Previous)	223	\$521,000,000	\$376,000,000	\$57,600,000	\$3,020,000,000
Budget	336	\$80,300,000	\$59,400,000	\$1,075,000	\$300,000,000
Adjusted Budget (Adj Budg)	336	\$98,200,000	\$64,200,000	\$1,497,935	\$341,000,000
Rotten Tomatoes Score (Previous)	222	60.16	24.92	6.00	100.00
Adjusted Domestic Profit (Dom Prof)	336	\$110,000,000	\$168,000,000	-\$164,000,000	\$1,750,000,000
Adjusted Foreign Profit (For Prof)	336	\$172,000,000	\$189,000,000	-\$116,000,000	\$1,180,000,000
Adjusted Total Profit (Tot Prof)	336	\$282,000,000	\$326,000,000	-\$228,000,000	\$2,930,000,000
Action	138	1	0	1	1
Foreign: Domestic Revenue	138	1.42	0.681	0.297	4.67
Adjusted Total BO Revenue	138	\$451,000,000	\$291,000,000	\$57,600,000	\$1,680,000,000
Horror	31	1	0	1	1
Foreign: Domestic Revenue	31	1.15	0.451	0.679	2.66
Adjusted Total BO Revenue	31	\$246,000,000	\$354,000,000	\$75,000,000	\$2,060,000,000
Comedy	59	1	0	1	1
Foreign: Domestic Revenue	59	1.18	0.839	0.222	5.53
Adjusted Total BO Revenue	59	\$353,000,000	\$185,000,000	\$72,100,000	\$860,000,000
Family	13	1	0	1	1
Foreign: Domestic Revenue	13	0.87	0.551	0.241	1.74
Adjusted Total BO Revenue	13	\$235,000,000	\$108,000,000	\$89,700,000	\$482,000,000
Fantasy	44	1	0	1	1
Foreign: Domestic Ratio	44	1.71	0.621	0.536	3.34
Adjusted Total BO Revenue	44	\$877,000,000	\$510,000,000	\$74,900,000	\$3,020,000,000
Animated	32	1	0	1	1
Foreign: Domestic Revenue	32	1.86	1.01	0.663	4.44
Adjusted Total BO Revenue	32	\$628,000,000	\$259,000,000	\$166,000,000	\$1,150,000,000
Drama	19	1	0	1	1
Foreign: Domestic Revenue	19	1.75	1.11	0.748	5.47
Adjusted Total BO Revenue	19	\$443,000,000	\$359,000,000	\$45,200,000	\$1,380,000,000
Franchise	336	58.52	32.30	1.00	113.00
Current Installment Green-Lit	29	0.09	0.28	0.00	1.00
3rd Installment Green-Lit (glit3)	76	0.23	0.42	0.00	1.00
4th Installment Green-Lit (glit4)	36	0.11	0.31	0.00	1.00
5th Installment Green-Lit (glit5)	18	0.05	0.23	0.00	1.00
6th Installment Green-Lit (glit6)	8	0.02	0.15	0.00	1.00
7th Installment Green-Lit (glit7)	5	0.01	0.12	0.00	1.00
First Installment (Film 1)	113				
FD1	113	1.079707	0.5107759	0.2220992	2.952969
Dom Rev 1	113	\$248,000,000	\$220,000,000	\$33,200,000	\$1,790,000,000
For Rev 1	113	\$254,000,000	\$210,000,000	\$19,100,000	\$1,220,000,000
Dom Prof 1	113	\$168,000,000	\$223,000,000	-\$27,300,000	\$1,750,000,000
For Prof 1	113	\$175,000,000	\$198,000,000	-\$32,800,000	\$1,180,000,000
Pre-2000	42				
2000-Present	71	38			
Second Installment (Film 2)	113				
FD 2	113	1.456469	0.8645868	0.2412949	5.526111
Dom Rev 2	113	\$193,000,000	\$140,000,000	\$6,984,331	\$831,000,000

<b>For Rev 2</b>	113	\$252,000,000	\$190,000,000	\$30,000,000	\$809,000,000
<b>Dom Prof 2</b>	113	\$89,100,000	\$131,000,000	-\$164,000,000	\$780,000,000
<b>For Prof 2</b>	113	\$148,000,000	\$170,000,000	-\$116,000,000	\$678,000,000
<b>Pre-2000</b>	25				
<b>2000-Present</b>	88				
<b>Third Installment (Film 3)</b>	<b>59</b>				
<b>FD 3</b>	59	1.580904	0.6779449	0.3108635	3.510709
<b>Dom Rev 3</b>	59	\$194,000,000	\$141,000,000	\$34,700,000	\$732,000,000
<b>For Rev 3</b>	59	\$297,000,000	\$235,000,000	\$30,700,000	\$951,000,000
<b>Dom Prof 3</b>	59	\$81,300,000	\$121,000,000	-\$63,600,000	\$655,000,000
<b>For Prof 3</b>	59	\$185,000,000	\$192,000,000	-\$25,100,000	\$831,000,000
<b>Pre-2000</b>	13				
<b>2000-Present</b>	46				
<b>Fourth Installment (Film 4)</b>	<b>30</b>				
<b>FD 4</b>	30	1.915649	0.8611855	0.9651791	4.437855
<b>Dom Rev 4</b>	30	\$159,000,000	\$137,000,000	\$31,500,000	\$672,000,000
<b>For Rev 4</b>	30	\$287,000,000	\$241,000,000	\$49,300,000	\$844,000,000
<b>Dom Prof 4</b>	30	\$51,900,000	\$110,000,000	-\$82,100,000	\$509,000,000
<b>For Prof 4</b>	30	\$181,000,000	\$201,000,000	\$5,117,415	\$638,000,000
<b>Pre-2000</b>	6				
<b>2000-Present</b>	24				
<b>Fifth Installment (Film 5)</b>	<b>12</b>				
<b>FD 5</b>	12	2.120516	1.060659	1.006529	4.671419
<b>Dom Rev 5</b>	12	\$148,000,000	\$134,000,000	\$32,400,000	\$407,000,000
<b>For Rev 5</b>	12	\$271,000,000	\$222,000,000	\$46,900,000	\$737,000,000
<b>Dom Prof 5</b>	12	\$59,400,000	\$92,300,000	-\$24,900,000	\$256,000,000
<b>For Prof 5</b>	12	\$183,000,000	\$176,000,000	\$26,700,000	\$566,000,000
<b>Pre-2000</b>	1				
<b>2000-Present</b>	11				
<b>Sixth Installment (Film 6)</b>	<b>6</b>				
<b>FD 6</b>	6	1.74003	0.4908572	1.21601	2.304342
<b>Dom Rev 6</b>	6	\$213,000,000	\$163,000,000	\$30,400,000	\$459,000,000
<b>For Rev 6</b>	6	\$375,000,000	\$270,000,000	\$44,600,000	\$695,000,000
<b>Dom Prof 6</b>	6	\$90,800,000	\$116,000,000	\$12,700,000	\$323,000,000
<b>For Prof 6</b>	6	\$252,000,000	\$184,000,000	\$32,500,000	\$429,000,000
<b>Seventh Installment (Film 7)</b>	<b>2</b>				
<b>FD 7</b>	2	2.111471	0.1879666	1.978558	2.244383
<b>Dom Rev 7</b>	2	\$185,000,000	\$191,000,000	\$49,400,000	\$320,000,000
<b>For Rev7</b>	1	\$1,010,000,000	.	\$1,010,000,000	\$1,010,000,000
<b>Dom Prof 7</b>	2	\$38,800,000	\$15,500,000	\$27,800,000	\$49,700,000
<b>For Prof 7</b>	2	\$262,000,000	\$263,000,000	\$76,200,000	\$448,000,000
<b>Eighth Installment (Film 8)</b>	<b>1</b>				
<b>FD 8</b>	1	2.52	.	2.52	2.52
<b>Dom Rev 8</b>	1	\$399,000,000	.	\$399,000,000	\$399,000,000
<b>For Rev 8</b>	2	\$408,000,000	\$439,000,000	\$97,800,000	\$718,000,000
<b>Dom Prof 8</b>	1	\$137,000,000	.	\$137,000,000	\$137,000,000
<b>For Prof 8</b>	1	\$745,000,000	.	\$745,000,000	\$745,000,000



**Table 3: The Genre Regression**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	FD	FD<2000	FD>1999	Log For Rev	Log For Rev<2000	Log For Rev>1999	Log Dom Rev	Log Dom Rev<2000	Log Dom Rev>1999	Log Tot Rev	Log Tot Rev<2000	Log Tot Rev>1999
<b>Year</b>	0.0210 <sup>***</sup> (0.00442)	0.0242 <sup>**</sup> (0.00950)	0.0466 <sup>***</sup> (0.0105)	-0.0170 <sup>***</sup> (0.00528)	Fixed	Fixed	-0.0329 <sup>***</sup> (0.00508)	-0.0489 <sup>***</sup> (0.0124)	-0.0275 <sup>**</sup> (0.0113)	-0.0245 <sup>***</sup> (0.00487)	-0.0369 <sup>***</sup> (0.0122)	Fixed
<b>Film2</b>	0.306 <sup>***</sup> (0.0862)	0.220 (0.138)	0.329 <sup>***</sup> (0.110)	0.0429 (0.0959)	0.186 (0.267)	0.068 (0.115)	-0.177 <sup>**</sup> (0.0861)	-0.138 (0.161)	-0.188 <sup>*</sup> (0.107)	-0.0592 (0.0848)	-0.0344 (0.157)	0.0684 (0.115)
<b>Film3</b>	0.399 <sup>***</sup> (0.0955)	0.446 <sup>**</sup> (0.191)	0.363 <sup>***</sup> (0.110)	0.193 <sup>*</sup> (0.110)	0.259 (0.279)	0.248 <sup>*</sup> (0.135)	-0.118 (0.102)	-0.439 <sup>**</sup> (0.206)	-0.0294 (0.116)	0.0499 (0.100)	-0.245 (0.188)	0.248 <sup>*</sup> (0.135)
<b>Film4</b>	0.685 <sup>***</sup> (0.156)	0.305 (0.223)	0.697 <sup>***</sup> (0.185)	0.239 <sup>**</sup> (0.121)	0.283 (0.258)	0.213 (0.147)	-0.234 <sup>*</sup> (0.125)	-0.252 (0.342)	-0.208 (0.132)	0.0310 (0.117)	-0.113 (0.290)	0.213 (0.147)
<b>Film5</b>	0.871 <sup>***</sup> (0.304)	0.582 <sup>***</sup> (0.208)	0.837 <sup>**</sup> (0.332)	0.200 (0.167)	-0.168 (0.588)	0.112 (0.184)	-0.324 <sup>*</sup> (0.182)	-1.136 <sup>***</sup> (0.137)	-0.309 (0.204)	-0.0138 (0.161)	-0.904 <sup>***</sup> (0.144)	0.112 (0.184)
<b>Film6</b>	0.381 <sup>*</sup> (0.226)		0.327 (0.232)	0.368 (0.269)		0.498 <sup>**</sup> (0.233)	0.0592 (0.237)		0.110 (0.234)	0.228 (0.250)		0.498 <sup>**</sup> (0.233)
<b>Film7</b>	0.903 <sup>***</sup> (0.143)		0.841 <sup>***</sup> (0.190)	0.519 <sup>***</sup> (0.188)		0.409 <sup>**</sup> (0.206)	-0.100 (0.276)		-0.0824 (0.264)	0.260 (0.226)		0.409 <sup>**</sup> (0.206)
<b>Film8</b>	0.996 <sup>***</sup> (0.103)		0.848 <sup>***</sup> (0.125)	1.094 <sup>***</sup> (0.131)		0.759 <sup>***</sup> (0.207)	0.514 <sup>***</sup> (0.123)		0.497 <sup>***</sup> (0.143)	0.872 <sup>***</sup> (0.123)		0.759 <sup>***</sup> (0.207)
<b>Horror</b>	-0.385 <sup>***</sup> (0.0877)	-0.187 (0.213)	-0.401 <sup>***</sup> (0.0999)	-0.806 <sup>***</sup> (0.119)	-0.946 <sup>***</sup> (0.261)	-0.878 <sup>***</sup> (0.120)	-0.565 <sup>***</sup> (0.111)	-0.281 (0.320)	-0.687 <sup>***</sup> (0.109)	-0.711 <sup>***</sup> (0.112)	-0.344 (0.313)	-0.878 <sup>***</sup> (0.120)
<b>Comedy</b>	-0.155 (0.119)	-0.273 <sup>*</sup> (0.143)	-0.0895 (0.164)	-0.334 <sup>***</sup> (0.111)	-0.363 (0.271)	-0.337 <sup>***</sup> (0.145)	-0.137 (0.101)	-0.00842 (0.175)	-0.168 (0.124)	-0.225 <sup>**</sup> (0.0978)	-0.143 (0.168)	-0.337 <sup>**</sup> (0.145)
<b>Family</b>	-0.488 <sup>***</sup> (0.155)	-0.289 (0.282)	-0.457 <sup>***</sup> (0.174)	-0.861 <sup>***</sup> (0.181)	-0.359 (0.306)	-1.02 <sup>***</sup> (0.186)	-0.297 <sup>***</sup> (0.106)	0.212 (0.144)	-0.419 <sup>***</sup> (0.134)	-0.537 <sup>***</sup> (0.112)	0.0691 (0.219)	-1.024 <sup>***</sup> (0.186)
<b>Fantasy</b>	0.205 <sup>**</sup> (0.0982)	-0.108 (0.177)	0.309 <sup>***</sup> (0.112)	0.749 <sup>***</sup> (0.121)	0.411 <sup>***</sup> (0.214)	0.782 <sup>***</sup> (0.142)	0.584 <sup>***</sup> (0.120)	0.703 <sup>**</sup> (0.299)	0.520 <sup>***</sup> (0.134)	0.673 <sup>***</sup> (0.117)	0.669 <sup>**</sup> (0.261)	0.782 <sup>***</sup> (0.142)
<b>Animated</b>	0.380 <sup>**</sup> (0.169)	-0.422 <sup>***</sup> (0.140)	0.441 <sup>**</sup> (0.176)	0.643 <sup>***</sup> (0.118)	0.260 (0.313)	0.593 <sup>***</sup> (0.131)	0.447 <sup>***</sup> (0.121)	0.736 <sup>***</sup> (0.236)	0.361 <sup>***</sup> (0.133)	0.571 <sup>***</sup> (0.112)	0.561 <sup>***</sup> (0.210)	0.593 <sup>***</sup> (0.131)
<b>Drama</b>	0.440 <sup>*</sup> (0.262)	0.276 (0.233)	0.594 (0.460)	-0.261 (0.177)	0.247 (0.304)	-0.701 <sup>***</sup> (0.173)	-0.529 <sup>***</sup> (0.201)	-0.00978 (0.188)	-1.006 <sup>***</sup> (0.307)	-0.379 <sup>**</sup> (0.169)	0.137 (0.185)	-0.701 <sup>***</sup> (0.173)
<b>_cons</b>	-40.89 <sup>***</sup> (8.843)	-47.12 <sup>**</sup> (18.93)	-92.43 <sup>***</sup> (21.03)	53.07 <sup>***</sup> (10.56)	19.99 <sup>**</sup> (.304)	18.95 (.279)	84.93 <sup>***</sup> (10.16)	116.6 <sup>***</sup> (24.80)	74.00 <sup>***</sup> (22.75)	68.89 <sup>***</sup> (9.750)	93.34 <sup>***</sup> (24.26)	18.95 <sup>***</sup> (0.280)
<b>N</b>	336	87	249	336	87	249	336	87	249	336	87	249
<b>R<sup>2</sup></b>	0.296	0.255	0.311	0.346	0.52	0.467	0.318	0.374	0.309	0.334	0.317	0.467

Standard errors in parentheses, \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 4: Genre Profit Regression**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Log Adj Budg	Log For Prof	Log For Prof<2000	Log For Prof>1999	Log Dom Prof	Log Dom Prof<2000	Log Dom Prof>1999	Log Tot Prof	Log Tot Prof<2000	Log Tot Prof>1999
<b>Year</b>	Fixed	-0.0255*** (0.00575)	-0.0612*** (0.0152)	0.0290*** (0.0108)	-0.0414*** (0.00648)	-0.0879*** (0.0151)	Fixed	-0.0331*** (0.00584)	-0.0759*** (0.0139)	Fixed
<b>Film2</b>	0.356*** (0.0956)	-0.256*** (0.0961)	-0.310* (0.183)	-0.281** (0.108)	-0.477*** (0.0989)	-0.542*** (0.188)	-0.495*** (0.116)	-0.358*** (0.0919)	-0.439** (0.171)	-0.371*** (0.107)
<b>Film3</b>	0.393*** (0.122)	-0.153 (0.104)	-0.588*** (0.214)	-0.0990 (0.110)	-0.465*** (0.113)	-0.968*** (0.227)	-0.355*** (0.123)	-0.297*** (0.103)	-0.774*** (0.206)	-0.202* (0.112)
<b>Film4</b>	0.442** (0.148)	-0.128 (0.149)	-0.655*** (0.237)	-0.125 (0.147)	-0.601** (0.156)	-0.928*** (0.304)	-0.567*** (0.163)	-0.421*** (0.141)	-0.789*** (0.259)	-0.313* (0.150)
<b>Film5</b>	0.322 (0.201)	0.0505 (0.186)	-1.436*** (0.304)	-0.0682 (0.164)	-0.474** (0.205)	-1.816*** (0.314)	-0.560** (0.225)	-0.36** (0.184)	-1.585*** (0.292)	-0.294 (0.179)
<b>Film6</b>	0.389* (0.235)	0.0575 (0.180)		-0.0260 (0.191)	-0.252 (0.202)		-0.288 (0.311)	-0.0832 (0.178)		-0.0800 (0.239)
<b>Film7</b>	0.878*** (0.269)	-0.180 (0.148)		-0.415*** (0.156)	-0.799*** (0.164)		-0.948*** (0.305)	-0.64*** (0.145)		-0.652*** (0.251)
<b>Film8</b>	0.993*** (0.234)	0.158 (0.122)		-0.0327 (0.134)	-0.422*** (0.135)		-0.511** (0.230)	-0.0637 (0.124)		-0.245 (0.207)
<b>Horror</b>	-1.961*** (0.221)	0.985*** (0.211)	0.119 (0.307)	1.159*** (0.215)	1.226*** (0.230)	0.191 (0.419)	1.441*** (0.243)	1.080*** (0.218)	0.128 (0.353)	1.300*** (0.225)
<b>Comedy</b>	-0.530*** (0.0914)	0.147 (0.112)	0.288 (0.218)	0.140 (0.129)	0.345*** (0.0995)	0.598*** (0.189)	0.272** (0.112)	0.257*** (0.0981)	0.463** (0.183)	0.205* (0.110)
<b>Family</b>	-0.565*** (0.198)	-0.462*** (0.117)	-0.358* (0.203)	-0.300** (0.126)	0.102 (0.201)	-0.0109 (0.401)	0.261 (0.229)	-0.138 (0.141)	-0.154 (0.281)	0.0251 (0.166)
<b>Fantasy</b>	0.177* (0.104)	0.567*** (0.101)	0.675*** (0.246)	0.542*** (0.111)	0.402*** (0.112)	0.711** (0.294)	0.317*** (0.120)	0.491*** (0.102)	0.676** (0.257)	0.451*** (0.111)
<b>Animated</b>	0.0833 (0.100)	0.584*** (0.102)	0.594*** (0.176)	0.508*** (0.0977)	0.389*** (0.106)	0.904*** (0.157)	0.277** (0.108)	0.512*** (0.0957)	0.729*** (0.150)	0.426*** (0.0971)
<b>Drama</b>	-0.685*** (0.176)	0.541** (0.228)	0.722** (0.309)	0.228 (0.232)	0.273 (0.265)	0.379 (0.310)	0.0242 (0.355)	0.224 (0.231)	0.526* (0.287)	0.181 (0.258)
<b>_cons</b>	18.10*** (0.176)	51.92*** (11.50)	123.1*** (30.37)	-57.42*** (21.63)	83.79*** (12.97)	176.3*** (30.12)	0.557*** (0.199)	67.74*** (11.69)	153.1*** (27.76)	1.219*** (0.190)
<b>N</b>	336	336	87	249	336	87	249	336	87	249
<b>R<sup>2</sup></b>	0.564	0.303	0.484	0.352	0.408	0.607	0.362	0.355	0.586	0.368

Standard errors in parentheses  
 \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

**Table 5: Franchise**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	FD	FD<2000	FD>1999	Log For Rev	Log For Rev<2000	Log For Rev>1999	Log Dom Rev	Log Dom Rev<2000	Log Dom Rev>1999	Log Tot Rev	Log Tot Rev<2000	Log Tot Rev>1999
<b>Year</b>	Fixed	Fixed	0.0753*** (0.0190)	-0.0274** (0.0133)	Fixed	Fixed	-0.0338*** (0.0116)	Fixed	-0.0607*** (0.0157)	-0.0307** (0.0119)	Fixed	-0.0316* (0.0162)
<b>Film 2</b>	0.195*** (0.081)	-.093 (0.218)	0.170* (0.0982)	0.242*** (0.0717)	-0.104 (0.370)	0.186** (0.0815)	0.0149 (0.0616)	0.0280 (0.420)	0.0628 (0.0695)	0.141** (0.0619)	-0.0209 (0.390)	0.131* (0.0696)
<b>Film 3</b>	0.377*** (0.132)	0.75 (0.358)	0.348** (0.157)	0.446*** (0.124)	-0.232 (0.609)	0.358*** (0.136)	-0.0152 (0.107)	-0.0907 (0.766)	0.0887 (0.120)	0.239** (0.109)	-0.0929 (0.689)	0.235* (0.122)
<b>Film 4</b>	0.478*** (0.201)	0.329 (0.578)	0.548** (0.245)	0.665*** (0.174)	0.437 (0.943)	0.479** (0.184)	0.00500 (0.154)	0.244 (0.937)	0.131 (0.164)	0.381** (0.155)	0.381 (0.867)	0.333** (0.168)
<b>Film 5</b>	0.645*** (0.279)	-0.259 (0.702)	0.695** (0.295)	0.550*** (0.211)	-1.488 (1.230)	0.376* (0.218)	-0.212 (0.187)	-0.824 (1.408)	0.00724 (0.205)	0.239 (0.188)	-1.016 (1.285)	0.241 (0.204)
<b>Film 6</b>	0.477 (0.296)		0.594* (0.320)	0.514 (0.355)		0.499 (0.376)	-0.218 (0.300)		0.0864 (0.361)	0.194 (0.317)		0.321 (0.366)
<b>Film 7</b>	0.273 (0.472)		0.538 (0.493)	0.791*** (0.274)		0.492 (0.303)	0.0146 (0.188)		0.244 (0.214)	0.467** (0.193)		0.456** (0.208)
<b>Film 8</b>	0.149 (0.339)		0.358 (0.376)	0.796*** (0.253)		0.489* (0.294)	0.151 (0.194)		0.472** (0.227)	0.539*** (0.203)		0.577** (0.239)
<b>RT</b>	-0.004* (0.002)	-0.003 (0.004)	-0.002 (0.00267)	0.009*** (0.00192)	0.000850 (0.00890)	0.00611*** (0.00192)	0.01*** (0.00175)	0.00644 (0.00940)	0.008*** (0.00173)	0.01*** (0.00174)	0.00442 (0.00872)	0.008*** (0.00169)
<b>Franchise</b>	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed		Fixed
<b>_cons</b>	1.40 (0.382)	0.55 (0.747)	-149.4*** (37.93)	73.17*** (26.66)	19.12*** (1.010)	18.49*** (0.234)	85.90*** (23.15)	87 (0.929)	139.9*** (31.34)	80.38*** (23.79)	87 (0.931)	82.28** (32.39)
<b>N</b>	336	87	249	336	87	249	336	0.00644	249	336	0.00442	249
<b>R<sup>2</sup></b>	0.8544	0.959	0.850	0.820	0.948	0.908	0.826	(0.00940)	0.900	0.825	(0.00872)	0.897

Standard errors in parentheses  
 \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

**Table 6: Franchise Profit**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	<b>Log Adj Budg</b>	<b>Log For Prof</b>	<b>Log For Prof&lt;2000</b>	<b>Log For Prof&gt;1999</b>	<b>Log Dom Prof</b>	<b>Log Dom Prof&lt;2000</b>	<b>Log Dom Prof&gt;1999</b>	<b>Log Tot Prof</b>	<b>Log Tot Prof&lt;2000</b>	<b>Log Tot Prof&gt;1999</b>
<b>Year</b>	Fixed	-0.0324** (0.0138)	Fixed	Fixed	-0.0389*** (0.0119)	-0.0555* (0.0321)	Fixed	-0.0357*** (0.0124)	Fixed	0.0188 (0.0244)
<b>Film 2</b>	0.421*** (.083)	-0.0460 (0.0827)	-0.194 (0.271)	-0.204* (0.104)	-0.273*** (0.0751)	-0.511** (0.244)	-0.328*** (0.104)	-0.147* (0.0756)	-0.352 (0.232)	-0.260*** (0.0995)
<b>Film 3</b>	0.668*** (.149)	0.0295 (0.140)	-0.486 (0.538)	-0.204 (0.184)	-0.432*** (0.127)	-1.018** (0.481)	-0.477*** (0.181)	-0.177 (0.128)	-0.705 (0.473)	-0.330* (0.177)
<b>Film 4</b>	0.891*** (.225)	0.121 (0.216)	-0.571 (0.786)	-0.326 (0.276)	-0.540*** (0.192)	-1.245* (0.631)	-0.670** (0.262)	-0.164 (0.200)	-0.837 (0.632)	-0.468* (0.263)
<b>Film 5</b>	1.01** (.268)	0.0209 (0.264)	-1.825 (1.091)	-0.491 (0.347)	-0.741*** (0.245)	-2.533*** (0.914)	-0.867*** (0.322)	-0.290 (0.246)	-2.044** (0.925)	-0.633* (0.328)
<b>Film 6</b>	1.15** (.315)	-0.123 (0.435)		-0.637 (0.519)	-0.856** (0.366)		-1.046** (0.477)	-0.443 (0.397)		-0.812 (0.494)
<b>Film 7</b>	1.69*** (.373)	-0.338 (0.303)		-1.036** (0.407)	-1.115*** (0.401)		-1.389*** (0.504)	-0.663** (0.319)		-1.177*** (0.420)
<b>Film 8</b>	1.56*** (.337)	-0.0337 (0.261)		-0.749* (0.403)	-0.678*** (0.248)		-0.897** (0.392)	-0.291 (0.234)		-0.792** (0.379)
<b>RT</b>	-0.001 (.001)	0.0101*** (0.00233)	0.00695 (0.00707)	0.00526** (0.00209)	0.0114*** (0.00228)	0.00843 (0.00646)	0.00691*** (0.00221)	0.0109*** (0.00222)	0.00799 (0.00625)	0.00621*** (0.00198)
<b>Franchise _cons</b>	Fixed 7.17 26.4	Fixed 66.00** (27.55)	Fixed 90.76 (95.35)	Fixed -81.63 (51.76)	Fixed 78.74*** (23.69)	Fixed 112.6* (64.18)	Fixed 21.62 (48.45)	Fixed 73.21*** (24.73)	Fixed 112.3 (70.04)	Fixed -35.96 (48.82)
<i>N</i>	336	336	87	249	336	87	249	336	87	249
<i>R</i> <sup>2</sup>	0.85	0.754	0.798	0.831	0.841	0.883	0.864	0.798	0.859	0.838

Standard errors in parentheses

**Table 7: The Interaction Regression**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	FD	FD<2000	FD>1999	Log For Rev	Log For Rev<2000	Log For Rev>1999	Log Dom Rev	Log Dom Rev<2000	Log Dom Rev>1999	Log Tot Rev	Log Tot Rev<2000	Log Tot Rev>1999
<b>Year</b>	0.0177***	0.0252**	0.0418***	-0.0158***	-0.0252	0.0106	-0.0315***	-0.0557***	-0.0209*	-0.0232***	-0.0416***	-0.00341
<b>Film 2</b>	0.141 (0.0994)	-0.0962 (0.193)	0.254** (0.108)	0.151 (0.170)	-0.0842 (0.352)	0.191 (0.200)	-0.0161 (0.155)	-0.0638 (0.295)	-0.0648 (0.191)	0.0674 (0.156)	-0.0790 (0.313)	0.0651 (0.187)
<b>Film 3</b>	0.523*** (0.141)	0.496 (0.345)	0.547*** (0.149)	0.406* (0.208)	0.385 (0.284)	0.361 (0.262)	-0.0251 (0.195)	-0.0392 (0.325)	-0.0822 (0.244)	0.209 (0.195)	0.193 (0.277)	0.158 (0.246)
<b>Film 4</b>	0.531** (0.224)	0.154 (0.452)	0.607** (0.272)	0.335* (0.202)	0.0843 (0.261)	0.326 (0.255)	-0.0899 (0.204)	-0.102 (0.361)	-0.129 (0.248)	0.143 (0.193)	0.00195 (0.274)	0.122 (0.240)
<b>Film 5</b>	1.556** (0.639)	0.636** (0.247)	1.557** (0.647)	0.600*** (0.212)	-0.404* (0.229)	0.452* (0.236)	-0.180 (0.353)	-1.060*** (0.195)	-0.333 (0.375)	0.314 (0.225)	-0.709*** (0.206)	0.161 (0.248)
<b>Film 6</b>	0.909*** (0.113)		0.885*** (0.138)	1.044*** (0.290)		0.864*** (0.309)	0.447* (0.254)		0.281 (0.276)	0.794*** (0.274)		0.616** (0.293)
<b>Film 7</b>	1.018*** (0.0862)		1.067*** (0.101)	1.585*** (0.136)		1.484*** (0.158)	0.928*** (0.117)		0.793*** (0.142)	1.308*** (0.120)		1.190*** (0.142)
<b>Film 8</b>	1.335*** (0.104)		1.365*** (0.126)	1.939*** (0.139)		1.811*** (0.162)	1.181*** (0.119)		1.036*** (0.147)	1.635*** (0.123)		1.497*** (0.146)
<b>Film1#Horr</b>	-0.259** (0.115)	-0.235 (0.328)	-0.176 (0.128)	-0.404 (0.297)	0.266 (0.726)	-0.628** (0.243)	-0.217 (0.250)	0.428 (0.405)	-0.514** (0.218)	-0.327 (0.270)	0.323 (0.544)	-0.585*** (0.221)
<b>Film1#Com</b>	-0.118 (0.152)	-0.466** (0.190)	0.157 (0.259)	-0.111 (0.200)	-0.375 (0.346)	0.192 (0.230)	0.0754 (0.152)	0.165 (0.251)	0.0912 (0.191)	0.00812 (0.157)	-0.0626 (0.271)	0.153 (0.187)
<b>Film1#Fam</b>	-0.291 (0.224)	-0.348 (0.326)	-0.293 (0.269)	-0.445 (0.309)	-0.0974 (0.496)	-0.670* (0.340)	-0.00955 (0.125)	0.341* (0.197)	-0.144 (0.179)	-0.175 (0.163)	0.157 (0.277)	-0.328* (0.171)

<b>Film1#Fant</b>	0.254*	-0.109	0.446**	0.784***	0.572	0.837***	0.553***	0.594	0.461**	0.668***	0.559	0.655***
	(0.144)	(0.125)	(0.184)	(0.235)	(0.496)	(0.282)	(0.198)	(0.472)	(0.211)	(0.214)	(0.476)	(0.244)
<b>Film1#Anim</b>	0.143	-0.297*	0.304	0.534***	0.336	0.561***	0.427***	0.610***	0.341*	0.480***	0.450**	0.457**
	(0.186)	(0.153)	(0.198)	(0.178)	(0.234)	(0.207)	(0.154)	(0.190)	(0.184)	(0.153)	(0.209)	(0.180)
<b>Film1#Dram</b>	0.266	0.281	-0.469***	0.263	0.459	-1.004***	0.0208	0.117	-0.722***	0.139	0.265	-0.874***
	(0.268)	(0.232)	(0.105)	(0.361)	(0.294)	(0.155)	(0.234)	(0.239)	(0.135)	(0.288)	(0.246)	(0.137)
<b>Film2#Horr</b>	-0.397***	-0.00578	-0.528***	-0.752***	-0.0478	-0.997***	-0.480***	-0.0956	-0.630***	-0.634***	-0.0878	-0.834***
	(0.146)	(0.438)	(0.119)	(0.225)	(0.431)	(0.198)	(0.170)	(0.270)	(0.195)	(0.190)	(0.247)	(0.189)
<b>Film2#Com</b>	-0.0919	-0.0556	-0.0830	-0.311	0.114	-0.432*	-0.183	0.111	-0.261	-0.233	0.112	-0.324
	(0.254)	(0.346)	(0.349)	(0.189)	(0.288)	(0.244)	(0.184)	(0.324)	(0.234)	(0.173)	(0.276)	(0.224)
<b>Film2#Fam</b>	-0.342		-0.257	-0.926***		-0.895***	-0.471**		-0.488**	-0.645***		-0.632***
	(0.283)		(0.293)	(0.247)		(0.267)	(0.186)		(0.214)	(0.139)		(0.175)
<b>Film2#Fant</b>	0.448***	0.455	0.434**	0.579**	0.868***	0.467	0.275	0.466	0.182	0.449*	0.658**	0.349
	(0.157)	(0.310)	(0.181)	(0.259)	(0.307)	(0.315)	(0.263)	(0.402)	(0.312)	(0.256)	(0.322)	(0.309)
<b>Film2#Anim</b>	0.697**	-0.216	0.709**	0.716***	0.772**	0.601***	0.383	1.055***	0.273	0.597***	0.899***	0.488**
	(0.308)	(0.251)	(0.334)	(0.192)	(0.306)	(0.214)	(0.250)	(0.258)	(0.284)	(0.198)	(0.271)	(0.224)
<b>Film2#Dram</b>	1.208	1.187**	1.322	-0.167	0.580	-0.638	-0.796	-0.432	-1.185	-0.411	0.0836	-0.815
	(0.739)	(0.545)	(1.175)	(0.411)	(0.374)	(0.511)	(0.575)	(0.287)	(0.887)	(0.430)	(0.284)	(0.611)
<b>Film3#Horr</b>	-0.733***	-0.731*	-0.655***	-0.977***	-1.313***	-0.862***	-0.519**	-1.033***	-0.435*	-0.789***	-1.231***	-0.685***
	(0.143)	(0.416)	(0.146)	(0.189)	(0.219)	(0.228)	(0.226)	(0.289)	(0.245)	(0.201)	(0.220)	(0.232)
<b>Film3#Com</b>	-0.514**	-0.276	-0.553**	-0.617**	-1.078***	-0.474	-0.286	-1.000***	-0.0891	-0.466*	-1.050***	-0.294
	(0.213)	(0.384)	(0.220)	(0.242)	(0.264)	(0.288)	(0.272)	(0.281)	(0.275)	(0.244)	(0.243)	(0.273)
<b>Film3#Fam</b>	-1.275***		-1.127***	-1.425***		-1.336**	-0.210		-0.229	-0.776***		-0.734**
	(0.262)		(0.299)	(0.491)		(0.545)	(0.197)		(0.237)	(0.279)		(0.327)

<b>Film3#Fant</b>	0.217	-0.395	0.481	0.674***	-0.0270	0.956***	0.609**	0.313	0.700**	0.662***	0.133	0.858***
	(0.271)	(0.537)	(0.302)	(0.259)	(0.199)	(0.294)	(0.276)	(0.547)	(0.303)	(0.249)	(0.334)	(0.282)
<b>Film3#Anim</b>	0.155		0.166	0.615*		0.551	0.569**		0.488	0.607**		0.534
	(0.364)		(0.380)	(0.326)		(0.372)	(0.278)		(0.314)	(0.300)		(0.342)
<b>Film3#Dram</b>	-0.00552	-0.463	0.373	-0.476**	-0.494	-0.479**	-0.471*	-0.290	-0.661*	-0.481**	-0.445	-0.545**
	(0.317)	(0.344)	(0.443)	(0.237)	(0.394)	(0.239)	(0.264)	(0.341)	(0.375)	(0.228)	(0.338)	(0.268)
<b>Film4#Horr</b>	-0.300	0.0401	-0.378	-0.973***	-1.355***	-0.921***	-0.898***	-1.663***	-0.787***	-0.957***	-1.534***	-0.880***
	(0.246)	(0.451)	(0.291)	(0.232)	(0.183)	(0.250)	(0.273)	(0.329)	(0.236)	(0.245)	(0.213)	(0.236)
<b>Film4#Com</b>	0.180		0.170	-0.423		-0.489*	-0.415*		-0.499*	-0.390**		-0.467**
	(0.813)		(0.793)	(0.299)		(0.283)	(0.230)		(0.272)	(0.190)		(0.204)
<b>Film4#Fam</b>	-0.735***		-0.798***	-1.412***		-1.531***	-1.020***		-1.126***	-1.260***		-1.377***
	(0.223)		(0.277)	(0.159)		(0.202)	(0.173)		(0.204)	(0.157)		(0.194)
<b>Film4#Fant</b>	0.246	-0.413	0.475	1.146***	1.441***	1.075***	1.036***	1.752***	0.826***	1.110***	1.568***	0.987***
	(0.463)	(0.418)	(0.543)	(0.196)	(0.0927)	(0.267)	(0.209)	(0.304)	(0.211)	(0.177)	(0.169)	(0.223)
<b>Film4#Anim</b>	1.418*		1.361	1.150***		1.031***	0.613***		0.507**	0.996***		0.879***
	(0.853)		(0.866)	(0.197)		(0.225)	(0.225)		(0.256)	(0.167)		(0.199)
<b>Film4#Dram</b>	0.358	0.0835	0.551	-0.548	0.362*	-1.007***	-0.801*	0.0977	-1.339***	-0.648	0.194	-1.124***
	(0.392)	(0.420)	(0.448)	(0.399)	(0.210)	(0.279)	(0.432)	(0.340)	(0.223)	(0.396)	(0.229)	(0.260)
<b>Film5#Horr</b>	-1.159		-1.144	-1.275***		-1.256***	-0.826**		-0.818**	-1.134***		-1.119***
	(0.777)		(0.782)	(0.262)		(0.277)	(0.352)		(0.369)	(0.236)		(0.255)
<b>Film5#Com</b>	-1.630**		-1.671**	-1.696***		-1.729***	-1.088***		-1.101***	-1.508***		-1.533***
	(0.637)		(0.643)	(0.159)		(0.168)	(0.332)		(0.343)	(0.187)		(0.197)
<b>Film5#Fant</b>	-1.057		-0.940	0.698***		0.824***	1.085***		1.135***	0.802***		0.896***
	(0.690)		(0.690)	(0.220)		(0.216)	(0.333)		(0.349)	(0.208)		(0.216)

<b>Film5#Dram</b>	-0.667			-0.948***			-0.988***			-1.039***		
	(0.643)			(0.199)			(0.351)			(0.217)		
<b>Film6#Horr</b>	-0.785***		-0.696***	-2.255***		-2.149***	-1.903***		-1.861***	-2.136***		-2.057***
	(0.0900)		(0.104)	(0.253)		(0.263)	(0.223)		(0.232)	(0.243)		(0.253)
<b>Film6#Fant</b>	-0.407		-0.259	0.358		0.517*	0.585**		0.649**	0.433*		0.552**
	(0.313)		(0.292)	(0.273)		(0.277)	(0.236)		(0.256)	(0.247)		(0.258)
<b>Film6#Dram</b>	-0.856***		-0.686***	-1.494***		-1.309***	-1.005***		-0.930***	-1.319***		-1.180***
	(0.0741)		(0.105)	(0.255)		(0.273)	(0.225)		(0.243)	(0.245)		(0.262)
<b>Film7#Horr</b>	-0.488***		-0.504***	-1.994***		-1.994***	-1.868***		-1.868***	-1.953***		-1.953***
	(0.116)		(0.135)	(1.18e-17)		(3.10e-15)	(2.14e-14)		(1.10e-14)	(2.14e-14)		(5.48e-15)
<b>RT</b>	-0.00327*	-0.00323	-0.00351*									
	(0.00171)	(0.00407)	(0.00198)									
<b>_cons</b>	-34.05***	-48.84**	-82.49***	50.62***	69.25**	-2.484	81.99***	130.0***	60.77**	66.18***	102.6***	26.42
	(8.856)	(21.08)	(22.34)	(10.92)	(30.81)	(26.35)	(10.40)	(24.72)	(24.51)	(10.01)	(25.20)	(24.07)
<b>N</b>	336	87	249	336	87	249	336	87	249	336	87	249
<b>R<sup>2</sup></b>	0.372	0.384	0.396	0.394	0.360	0.478	0.371	0.514	0.360	0.390	0.450	0.434

Standard errors in parentheses  
\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



**Table 8: The Interaction Regression (Controlling for franchise)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	FD	FD<2000	FD>1999	Log For Rev	Log For Rev<2000	Log For Rev>1999	Log Dom Rev	Log Dom Rev<2000	Log Dom Rev>1999	Log Tot Rev	Log Tot Rev<2000	Log Tot Rev>1999
<b>Year</b>	Fixed	Fixed	0.0650*** (.022)	-0.0415*** (0.0135)	Fixed	Fixed	-0.0486*** (0.0123)	Fixed	-0.0654*** (0.0167)	-0.0451*** (0.0124)	Fixed	-0.0395** (0.0154)
<b>Film 2</b>	0.0484 (0.0929)	-0.565 (0.477)	0.115 (0.114)	0.236** (0.0944)	0.0914 (0.320)	0.234** (0.106)	0.0402 (0.0890)	0.140 (0.314)	0.0492 (0.0964)	0.140 (0.0855)	0.134 (0.296)	0.135 (0.0922)
<b>Film 3</b>	0.419** (0.164)	-0.813 (0.659)	0.444** (0.223)	0.662*** (0.154)	0.583 (0.565)	0.553*** (0.183)	0.0584 (0.124)	0.112 (0.450)	0.113 (0.180)	0.385*** (0.130)	0.418 (0.466)	0.341** (0.170)
<b>Film 4</b>	0.345 (0.307)	-1.029 (1.320)	0.455 (0.382)	0.944*** (0.211)	0.454 (0.873)	0.822*** (0.236)	0.257 (0.199)	0.0451 (0.735)	0.415** (0.195)	0.628*** (0.197)	0.336 (0.756)	0.628*** (0.203)
<b>Film 5</b>	1.025** (0.478)	-3.204* (1.611)	1.268** (0.599)	1.267*** (0.313)	-0.480 (1.187)	1.035*** (0.363)	0.234 (0.263)	-0.970 (0.940)	0.378 (0.299)	0.859*** (0.273)	-0.557 (0.995)	0.776** (0.306)
<b>Film 6</b>	1.025*** (0.328)		1.144*** (0.404)	1.638*** (0.451)		1.396*** (0.504)	0.445 (0.429)		0.638 (0.472)	1.132*** (0.426)		1.066** (0.465)
<b>Film 7</b>	0.624 (0.482)		1.047** (0.459)	1.531*** (0.478)		1.315** (0.537)	0.424 (0.416)		0.613 (0.482)	1.081** (0.429)		1.014** (0.486)
<b>Film 8</b>	0.878* (0.491)		1.369*** (0.477)	1.911*** (0.482)		1.674*** (0.545)	0.694 (0.420)		0.900* (0.490)	1.430*** (0.433)		1.357*** (0.492)
<b>Film1#Horr</b>	0.0649 (0.444)	0.570 (0.436)	0.392 (0.417)	1.206** (0.545)	2.799*** (0.471)	0.877* (0.520)	1.082** (0.536)	2.257*** (0.606)	0.868* (0.503)	1.184** (0.522)	2.510*** (0.519)	0.885* (0.495)
<b>Film1#Com</b>	1.146*** (0.422)	-0.260 (0.604)	1.533*** (0.528)	1.747*** (0.322)	1.363** (0.566)	1.937*** (0.336)	1.448*** (0.314)	1.656*** (0.413)	1.392*** (0.318)	1.678*** (0.299)	1.558*** (0.456)	1.751*** (0.306)
<b>Film1#Fam</b>	0.600* (0.324)		0.724** (0.348)	0.780*** (0.287)		0.768*** (0.282)	1.250*** (0.195)		1.203*** (0.192)	1.153*** (0.208)		1.180*** (0.229)

<b>Film1#Fant</b>	0.922**	1.042	1.150***	1.119**	0.471	1.054**	0.326	-0.354	0.260	0.788*	-0.0237	0.698
	(0.440)	(0.734)	(0.420)	(0.472)	(0.813)	(0.522)	(0.414)	(0.566)	(0.453)	(0.425)	(0.603)	(0.472)
<b>Film1#Anim</b>	-0.721	-0.188	-0.949	0.00582	-0.193	0.147	0.329	-0.274	0.401*	0.0442	-0.245	0.164
	(0.555)	(0.379)	(0.574)	(0.246)	(0.293)	(0.285)	(0.219)	(0.318)	(0.233)	(0.243)	(0.301)	(0.274)
<b>Film1#Dram</b>	0.0896		-1.393***	2.055***	0.719	0.408	1.171**	0.212	1.135***	1.646***	0.444	0.677
	(0.683)		(0.370)	(0.542)	(0.486)	(0.431)	(0.550)	(0.482)	(0.421)	(0.515)	(0.437)	(0.435)
<b>Film2#Horr</b>	-0.170		0.0742	0.825	2.276***	0.529	0.797*	1.546**	0.726	0.848*	1.891***	0.638
	(0.419)		(0.389)	(0.503)	(0.424)	(0.530)	(0.455)	(0.564)	(0.494)	(0.461)	(0.472)	(0.501)
<b>Film2#Com</b>	1.244***	0.125	1.419***	1.539***	1.789***	1.483***	1.184***	1.455***	1.045***	1.429***	1.591***	1.360***
	(0.438)	(1.089)	(0.533)	(0.315)	(0.500)	(0.331)	(0.322)	(0.380)	(0.341)	(0.299)	(0.408)	(0.318)
<b>Film2#Fam</b>	0.721**		0.484	0.330		0.445	0.809**		0.869***	0.709***		0.805***
	(0.346)		(0.323)	(0.246)		(0.269)	(0.184)		(0.169)	(0.196)		(0.217)
<b>Film2#Fant</b>	1.058**	-0.185	1.174***	0.906**	0.178	0.889*	0.0433	-1.014**	0.166	0.562	-0.480	0.587
	(0.455)	(0.919)	(0.418)	(0.459)	(0.668)	(0.502)	(0.409)	(0.471)	(0.446)	(0.417)	(0.484)	(0.460)
<b>Film2#Anim</b>	-0.323		-0.523	0.203		0.266	0.295		0.393*	0.174		0.267
	(0.535)		(0.541)	(0.230)		(0.251)	(0.215)		(0.216)	(0.232)		(0.250)
<b>Film2#Dram</b>	1.669***	-1.495	-0.430	1.699***	0.581	1.148**	0.404	-0.561	1.294***	1.160**	0.0380	1.169**
	(0.621)	(0.834)	(0.458)	(0.522)	(0.509)	(0.537)	(0.567)	(0.376)	(0.475)	(0.515)	(0.359)	(0.528)
<b>Film3#Horr</b>	-0.443	-2.097	-0.171	0.373	0.280	0.568	0.711	0.594*	0.933*	0.552	0.403	0.744
	(0.412)	(1.364)	(0.377)	(0.531)	(0.273)	(0.510)	(0.473)	(0.325)	(0.481)	(0.484)	(0.273)	(0.482)
<b>Film3#Com</b>	0.838*		1.001*	1.025***		1.119***	0.849**		0.855**	0.984***		1.048***
	(0.437)		(0.542)	(0.330)		(0.346)	(0.345)		(0.352)	(0.321)		(0.336)
<b>Film3#Fam</b>	0.00284		0.0413	0.343		0.549	0.905***		0.847***	0.660**		0.736**
	(0.276)		(0.345)	(0.437)		(0.460)	(0.242)		(0.297)	(0.303)		(0.371)
<b>Film3#Fant</b>	0.817*		1.062***	0.468	-0.774	0.661	-0.0153	-1.099*	0.109	0.313	-1.012	0.452
	(0.433)		(0.365)	(0.490)	(0.874)	(0.497)	(0.427)	(0.616)	(0.473)	(0.437)	(0.637)	(0.471)

<b>Film3#Anim</b>	-0.698 (0.555)		-0.844 (0.559)	0.0136 (0.261)		-0.0586 (0.308)	0.327 (0.221)		0.255 (0.245)	0.0842 (0.255)		0.0237 (0.299)
<b>Film3#Dram</b>	1.279* (0.737)	-0.714 (0.737)	-0.0692 (0.365)	1.215** (0.499)	-0.676 (0.818)	0.723* (0.398)	0.485 (0.479)	-0.290 (0.477)	0.871** (0.418)	0.913* (0.470)	-0.480 (0.585)	0.775* (0.411)
<b>Film4#Horr</b>	-0.0732 (0.430)		0.0305 (0.373)	0.127 (0.541)		0.329 (0.494)	0.137 (0.506)		0.409 (0.463)	0.162 (0.508)		0.371 (0.468)
<b>Film4#Com</b>	1.269** (0.641)		1.533** (0.770)	1.008*** (0.312)		0.957*** (0.298)	0.682** (0.274)		0.518* (0.295)	0.965*** (0.244)		0.853*** (0.244)
<b>Film4#Fant</b>	0.936* (0.476)		1.192** (0.507)	0.639 (0.477)		0.539 (0.488)	0.0301 (0.425)		-0.108 (0.432)	0.427 (0.431)		0.299 (0.447)
<b>Film4#Dram</b>	1.607** (0.646)			0.919* (0.549)			-0.0584 (0.605)			0.530 (0.551)		
<b>Film5#Horr</b>	-0.567 (0.680)		-0.581 (0.636)	-0.151 (0.565)		-0.120 (0.581)	0.166 (0.484)		0.200 (0.511)	-0.0180 (0.507)		0.00173 (0.534)
<b>Film5#Fant</b>	0.169 (0.485)		0.139 (0.512)	0.260 (0.496)		0.327 (0.536)	0.0577 (0.425)		0.0520 (0.462)	0.154 (0.446)		0.188 (0.486)
<b>Film5#Dram</b>	0.969* (0.538)			0.0615 (0.504)			-0.672 (0.462)			-0.276 (0.470)		
<b>Film6#Horr</b>	-0.492* (0.296)		-0.374* (0.195)	-0.934*** (0.204)		-0.888*** (0.167)	-0.554*** (0.0831)		-0.575*** (0.0678)	-0.770*** (0.134)		-0.765*** (0.125)
<b>RT</b>	-0.0053*** (0.00188)	-0.00519 (0.00424)	-0.00615** (0.00242)									
<b>Franchise</b>	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
<b>_cons</b>	1.716** (0.736)	-1.481 (2.209)	-130.0*** (43.69)	101.6*** (27.22)	34.90 (133.7)	59.67 (36.56)	115.1*** (24.85)	144.6 (93.56)	149.1*** (33.62)	109.3*** (25.01)	106.3 (104.4)	97.99*** (31.05)
<b>N</b>	336	87	249	336	87	249	336	87	249	336	87	249
<b>R<sup>2</sup></b>	0.894	0.986	0.891	0.846	0.857	0.924	0.837	0.861	0.916	0.844	0.853	0.921

**Table 9: Interaction Profit Regression (Controlling for Franchise)**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	<b>Log For Prof</b>	<b>Log For Prof&lt;2000</b>	<b>Log For Prof&gt;1999</b>	<b>Log Dom Prof</b>	<b>Log Dom Prof&lt;2000</b>	<b>Log Dom Prof&gt;1999</b>	<b>Log Tot Prof</b>	<b>Log Tot Prof&lt;2000</b>	<b>Log Tot Prof&gt;1999</b>
<b>Year</b>	-0.0454*** (0.0131)	Fixed	Fixed	-0.0525*** (0.0119)	-0.0736** (0.0343)	Fixed	-0.0491*** (0.0121)	Fixed	Fixed
<b>Film 2</b>	-0.120 (0.106)	-0.607* (0.336)	-0.104 (0.109)	-0.315*** (0.105)	-0.559 (0.378)	-0.289* (0.112)	-0.216** (0.102)	-0.565 (0.337)	-0.203* (0.106)
<b>Film 3</b>	0.150 (0.162)	-0.335 (0.544)	-0.0556 (0.190)	-0.453*** (0.149)	-0.806 (0.510)	-0.496*** (0.188)	-0.127 (0.147)	-0.501 (0.478)	-0.268 (0.182)
<b>Film 4</b>	0.208 (0.270)	-0.943 (0.663)	-0.0302 (0.267)	-0.479* (0.259)	-1.352*** (0.610)	-0.437* (0.248)	-0.108 (0.264)	-1.061* (0.558)	-0.225 (0.252)
<b>Film 5</b>	0.742** (0.298)	-2.039** (0.892)	0.0688 (0.349)	-0.292 (0.256)	-2.528*** (0.767)	-0.588* (0.314)	0.334 (0.270)	-2.116*** (0.713)	-0.190 (0.315)
<b>Film 6</b>	1.079*** (0.252)		0.359 (0.325)	-0.113 (0.242)		-0.399 (0.318)	0.574** (0.235)		0.0282 (0.304)
<b>Film 7</b>	0.955*** (0.329)		0.156 (0.439)	-0.152 (0.244)		-0.546 (0.387)	0.505* (0.270)		-0.145 (0.400)
<b>Film 8</b>	1.369*** (0.336)		0.499 (0.454)	0.153 (0.251)		-0.274 (0.403)	0.888*** (0.278)		0.183 (0.414)
<b>Film1#Horr</b>	2.208*** (0.556)	1.545** (0.726)	1.631** (0.669)	2.084*** (0.474)	1.004 (0.794)	1.621*** (0.587)	2.186*** (0.508)	1.256* (0.735)	1.639** (0.628)
<b>Film1#Com</b>	0.691* (0.401)	1.046** (0.461)	1.100*** (0.384)	0.392 (0.391)	1.340*** (0.351)	0.555 (0.401)	0.622 (0.385)	1.241*** (0.362)	0.915** (0.382)

<b>Film1#Fam</b>	-0.658***		-0.137	-0.189		0.298	-0.286		0.275
	(0.223)		(0.288)	(0.244)		(0.249)	(0.215)		(0.260)
<b>Film1#Fant</b>	1.316***	0.255	1.076***	0.523**	-0.570	0.282	0.985***	-0.240	0.719**
	(0.325)	(0.806)	(0.357)	(0.250)	(0.364)	(0.296)	(0.273)	(0.485)	(0.316)
<b>Film1#Anim</b>	-0.430	0.0783	-0.0226	-0.107	-0.00273	0.232	-0.392	0.0260	-0.00491
	(0.288)	(0.282)	(0.288)	(0.251)	(0.318)	(0.238)	(0.295)	(0.285)	(0.294)
<b>Film1#Dram</b>	2.376***	1.444**	0.476**	1.493***	0.937**	1.203***	1.968***	1.169**	0.745***
	(0.571)	(0.532)	(0.227)	(0.414)	(0.442)	(0.216)	(0.504)	(0.477)	(0.228)
<b>Film2#Horr</b>	1.799***	0.856	1.304**	1.771***	0.126	1.501***	1.823***	0.470	1.413***
	(0.411)	(0.720)	(0.530)	(0.344)	(0.787)	(0.473)	(0.369)	(0.730)	(0.504)
<b>Film2#Com</b>	0.517	1.927***	0.544	0.162	1.593***	0.106	0.407	1.728***	0.421
	(0.406)	(0.437)	(0.386)	(0.420)	(0.389)	(0.433)	(0.401)	(0.375)	(0.399)
<b>Film2#Fam</b>	-0.950***		-0.626**	-0.472		-0.203	-0.572**		-0.266
	(0.237)		(0.283)	(0.289)		(0.326)	(0.251)		(0.300)
<b>Film2#Fant</b>	1.422***	0.301	1.057***	0.559***	-0.891*	0.333	1.078***	-0.357	0.755**
	(0.299)	(0.758)	(0.369)	(0.212)	(0.441)	(0.286)	(0.241)	(0.515)	(0.324)
<b>Film2#Anim</b>	-0.141		0.0438	-0.0494		0.170	-0.170		0.0442
	(0.262)		(0.254)	(0.250)		(0.233)	(0.277)		(0.269)
<b>Film2#Dram</b>	1.601***	0.950	0.655***	0.306	-0.192	0.801***	1.062***	0.407	0.675***
	(0.368)	(0.674)	(0.249)	(0.333)	(0.332)	(0.205)	(0.339)	(0.462)	(0.242)
<b>Film3#Horr</b>	1.396***	-0.255	1.318***	1.734***	0.0589	1.683***	1.575***	-0.133	1.494***
	(0.404)	(0.385)	(0.500)	(0.377)	(0.279)	(0.518)	(0.373)	(0.304)	(0.501)
<b>Film3#Com</b>	-0.112		0.186	-0.287		-0.0787	-0.153		0.115
	(0.387)		(0.351)	(0.401)		(0.379)	(0.383)		(0.354)
<b>Film3#Fam</b>	0.0103		0.542**	0.572		0.840**	0.327		0.729***

	(0.216)		(0.217)	(0.359)		(0.334)	(0.283)		(0.268)
<b>Film3#Fant</b>	0.972 <sup>***</sup>	-0.586	0.962 <sup>***</sup>	0.488 <sup>**</sup>	-0.911 <sup>*</sup>	0.410	0.816 <sup>***</sup>	-0.824	0.753 <sup>**</sup>
	(0.342)	(0.928)	(0.356)	(0.240)	(0.522)	(0.312)	(0.269)	(0.614)	(0.327)
<b>Film3#Anim</b>	-0.121		0.0653	0.193		0.379	-0.0502		0.148
	(0.273)		(0.264)	(0.262)		(0.256)	(0.285)		(0.280)
<b>Film3#Dram</b>	0.896 <sup>**</sup>	-0.519	0.368 <sup>*</sup>	0.166	-0.133	0.516 <sup>**</sup>	0.593 <sup>*</sup>	-0.323	0.420 <sup>*</sup>
	(0.393)	(0.469)	(0.211)	(0.302)	(0.397)	(0.238)	(0.344)	(0.311)	(0.220)
<b>Film4#Horr</b>	1.375 <sup>***</sup>		1.117 <sup>**</sup>	1.384 <sup>***</sup>		1.197 <sup>***</sup>	1.409 <sup>***</sup>		1.158 <sup>**</sup>
	(0.436)		(0.495)	(0.368)		(0.437)	(0.395)		(0.467)
<b>Film4#Com</b>	0.156		0.114	-0.170		-0.324	0.113		0.0108
	(0.325)		(0.270)	(0.337)		(0.372)	(0.281)		(0.261)
<b>Film4#Fant</b>	1.012 <sup>***</sup>		0.764 <sup>**</sup>	0.403 <sup>*</sup>		0.116	0.800 <sup>***</sup>		0.523 <sup>*</sup>
	(0.322)		(0.356)	(0.242)		(0.277)	(0.273)		(0.311)
<b>Film4#Dram</b>	0.861 <sup>*</sup>			-0.116			0.472		
	(0.480)			(0.369)			(0.432)		
<b>Film5#Horr</b>	0.801		0.722	1.118 <sup>***</sup>		1.042 <sup>***</sup>	0.934 <sup>**</sup>		0.844 <sup>*</sup>
	(0.545)		(0.555)	(0.341)		(0.392)	(0.455)		(0.483)
<b>Film5#Fant</b>	0.337		0.479	0.135		0.204	0.232		0.340
	(0.356)		(0.378)	(0.282)		(0.289)	(0.313)		(0.327)
<b>Film5#Dram</b>	-1.028 <sup>***</sup>			-1.761 <sup>***</sup>			-1.365 <sup>***</sup>		
	(0.307)			(0.251)			(0.272)		
<b>Film6#Horr</b>	-0.374		-0.383	0.00498		-0.0704	-0.211		-0.260
	(0.238)		(0.276)	(0.121)		(0.190)	(0.172)		(0.239)
<b>Franchise</b>	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
<b>_cons</b>	92.18 <sup>***</sup>	37.89	-49.10	106.6 <sup>***</sup>	148.1 <sup>**</sup>	41.00	100.3 <sup>***</sup>	109.5	-10.52
	(26.18)	(107.0)	(43.30)	(23.82)	(68.36)	(42.79)	(24.16)	(72.29)	(40.23)
<b>N</b>	336	87	249	336	87	249	336	87	249
<b>R<sup>2</sup></b>	0.813	0.905	0.878	0.869	0.929	0.892	0.841	0.923	0.877

**Table 10: Green-Light Probit 1**

	(1)	(2)	(3)	(4)	(5)	(6)
	GlitCurrent	Glit3	Glit4	Glit5	Glit6	Glit7
<b>Log Adj. For. Rev. (Prev. Installment)</b>	1.196 <sup>***</sup> (0.280)	-0.219 (0.199)	0.675 <sup>**</sup> (0.286)	0.891 <sup>***</sup> (0.332)	0.790 (0.624)	0.611 (0.475)
<b>Log Adj. Dom. Rev. (Prev. Installment)</b>	-1.073 <sup>***</sup> (0.289)	0.831 <sup>***</sup> (0.239)	-0.227 (0.263)	-0.290 (0.290)	-0.539 (0.642)	-0.661 (0.569)
<b>RT (Previous)</b>	-0.00331 (0.00499)	-0.0109 <sup>***</sup> (0.00395)	-0.00609 (0.00500)	-0.0132 <sup>**</sup> (0.00670)	-0.00609 (0.00500)	0.0200 <sup>***</sup> (0.00627)
<b>Horror</b>	0.0696 (0.408)	0.105 (0.355)	0.620 (0.430)	0.809 <sup>*</sup> (0.457)	0.906 (0.738)	0.809 <sup>*</sup> (0.433)
<b>Comedy</b>	0 (.)	-0.459 <sup>*</sup> (0.264)	-0.658 <sup>*</sup> (0.398)	-0.258 (0.512)		0 (.)
<b>Family</b>	0 (.)	-0.511 (0.469)	0.128 (0.605)	0 (.)		0 (.)
<b>Fantasy</b>	-0.0540 (0.317)	-0.285 (0.286)	-0.356 (0.385)	-0.0635 (0.338)	0.148 (0.469)	0.453 (0.496)
<b>Animated</b>	0.0875 (0.333)	0.0975 (0.282)	-0.152 (0.373)	-0.890 <sup>**</sup> (0.449)		
<b>Drama</b>	-0.617 (0.520)	-0.180 (0.451)	0.487 (0.577)	0.935 <sup>*</sup> (0.479)	0.541 (0.546)	
<b>Year</b>		Fixed	Fixed	0.0503 <sup>***</sup> (0.0165)	Fixed	0.0946 <sup>***</sup> (0.0339)
<b>_cons</b>	-3.880 (3.076)	-10.87 <sup>***</sup> (3.090)	-9.697 <sup>**</sup> (4.649)	-113.5 <sup>***</sup> (32.66)	-5.217 (5.408)	-192.8 <sup>***</sup> (70.09)
<b>N</b>	29	76	36	18	8	5
<b>R<sup>2</sup></b>						

Standard errors in parentheses

- $p < 0.10$ ,  $** p < 0.05$ ,  $*** p < 0.01$
-

**Table 11: Green-Light Probit 2**

	(1)	(2)	(4)	(5)	(6)	(7)	(8)
	Glit3<2000	Glit4<2000	Glit3>1999	Glit4>1999	Glit5>1999	Glit6>1999	Glit7>1999
<b>Log Adj. For. Rev. (Previous Installment)</b>	-0.250 (0.568)	0.698 (0.572)	-0.179 (0.197)	0.416* (0.222)	1.074*** (0.337)	0.758 (0.484)	0.629 (0.468)
<b>Log Adj. Dom. Rev. (Previous Installment)</b>	1.151* (0.642)	-0.120 (0.618)	0.693*** (0.225)	-0.484 (0.239)	-0.720** (0.291)	-0.748 (0.528)	-0.680 (0.563)
<b>RT (Previous)</b>	-0.0173 (0.0106)	-0.0275** (0.0110)	-0.00721* (0.00418)	-0.00590 (0.00470)	-0.0101 (0.00716)	0.00401 (0.00971)	0.0200*** (0.00622)
<b>Horror</b>	1.076 (1.095)	-0.911 (0.895)	-0.0757 (0.361)	0.572 (0.407)	0.664 (0.459)	0.754* (0.403)	0.806* (0.432)
<b>Comedy</b>	-0.806 (0.601)	0 (.)	-0.325 (0.293)	-0.320 (0.393)	-0.331 (0.536)		0 (.)
<b>Family</b>	0 (.)	0 (.)	-0.330 (0.473)	0.146 (0.596)	0 (.)	0 (.)	0 (.)
<b>Fantasy</b>	-0.466 (0.881)	-0.378 (0.687)	-0.241 (0.298)	-0.188 (0.353)	-0.238 (0.361)	0.135 (0.458)	0.425 (0.490)
<b>Animated</b>	0 (.)	0 (.)	0.0768 (0.292)	0.0112 (0.343)	-0.896** (0.456)		0 (.)
<b>Drama</b>	-0.994 (0.618)	-0.948 (0.793)	0.276 (0.494)	0.679 (0.545)	0.169 (0.627)		
<b>Year</b>	Fixed	-0.066* (.039)	Fixed	Fixed	Fixed	Fixed	0.0868** (0.041)
<b>_cons</b>	-16.95** (8.241)	120.8 (78.20)	-9.936*** (3.245)	39.62 (55.65)	-8.079** (4.002)	-2.610 (3.982)	-177.1** (84.01)
<b>N</b>	19	9	57	27	16	7	5
<b>R<sup>2</sup></b>							

Standard errors in parentheses  
 $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$



**Table 12: Heckman Selection Model**

	(1)	(1)	(1)
	<b>FD3</b>	<b>FD4</b>	<b>FD5</b>
<b>FD3</b>			
<b>Horror</b>	-0.954 <sup>***</sup> (0.342)	-0.272 (1.442)	-1.212 <sup>**</sup> (0.602)
<b>Comedy</b>	-0.620 <sup>**</sup> (0.249)	1.592 (2.261)	-2.272 <sup>**</sup> (0.943)
<b>Family</b>	-1.382 <sup>***</sup> (0.464)	-0.932 (2.815)	
<b>Fantasy</b>	0.141 (0.281)	1.007 (1.567)	-0.517 (0.695)
<b>Animated</b>	0.119 (0.290)	1.574 (2.025)	
<b>Drama</b>	-0.0420 (0.347)	0.195 (1.826)	0.964 (2.158)
<b>RT</b>	-0.00671 <sup>*</sup> (0.00374)	-0.00274 (0.0187)	-0.0140 (0.0102)
<b>Year</b>	0.0164 (0.0107)	-0.00195 (0.0833)	0.105 (0.0890)
<b>_cons</b>	-31.26 (21.32)	9.692 (169.4)	-208.7 (179.3)
<b>Select</b>			
<b>FD (Previous)</b>	-0.354 <sup>*</sup> (0.204)	0.318 (0.239)	0.103 (0.386)
<b>RT (Previous)</b>	-0.0108 <sup>**</sup> (0.00480)	-0.00233 (0.00690)	-0.0400 <sup>***</sup> (0.0144)
<b>Horror</b>	-0.253 (0.350)	0.100 (0.450)	1.322 (1.033)
<b>Comedy</b>	-0.314 (0.288)	-0.440 (0.489)	0.896 (1.007)
<b>Family</b>	0.0670 (0.569)	0.387 (0.835)	-4.706 (.)

<b>Fantasy</b>	-0.337	-0.247	-1.036
	(0.333)	(0.454)	(0.910)
<b>Animated</b>	-0.0457	-0.352	-7.771
	(0.362)	(0.595)	(.)
<b>Drama</b>	-0.0870	0.160	0.973
	(0.421)	(0.508)	(1.021)
<b>Year</b>	-0.00435	0.0118	0.0943*
	(0.0141)	(0.0206)	(0.0543)
<b>Log Total Prev</b>	0.428**	-0.0506	2.067**
	(0.200)	(0.307)	(0.976)
<b>_cons</b>	0.855	-23.53	-229.5*
	(29.62)	(43.77)	(120.6)
<b>mills</b>			
<b>lambda</b>	0.528	-3.467	0.218
	(0.460)	(3.484)	(0.501)
<i>N</i>	201	110	51
<i>R</i> <sup>2</sup>			

Standard errors in parentheses

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$