

Genre trends at the US box office, 1991 to 2010

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Abstract

This paper examines genre trends in the top 50 grossing films at the US box office each year from 1991 to 2010, focussing on the frequency and rank of different genres, the box office gross and release patterns of films in different genres, and the release profile of Hollywood studios. The results show a narrowing of the range of genres at the highest rankings, with fantasy/science fiction movies coming to dominate at the expense of comedy, crime/thriller, and drama films. There are also marginal increases in action/adventure and family films. Analysis of the opening and total gross for each film reveals that different genres are characterized by different release patterns, and noted the importance of awards in contributing to the box office gross of drama films. With one notable exception, there is no evidence of genre specialization among film studios in contemporary Hollywood cinema.

Keywords: Hollywood, genre, box office gross

1. Introduction

Product categories are cultural schemas that underpin markets by providing a shared frame of reference for producers and consumers through which products are endowed with identities and meanings. Product categories circumscribe product characteristics and producer behaviour, providing an abstract set of product features, institutional logics, and practical guidelines that determine the production process (Jensen 2010); while making it possible for consumers to navigate a market by evaluating specific products based on their category prototypes (Sujan 1985). These categories emerge from interactions between producers and consumers as 'consensual conceptual schemes that define goods being exchanged as experientially similar' (Lounsbury & Rao 2004: 970), which are codified and maintained by both formal (e.g. trade bodies, unions, industry media) and informal (e.g. word-of-mouth) networks (Rosa *et al.* 1999, Ellison & Fudenberg 1995).

The dominant set of product categories in Hollywood cinema are *genres*, which function as a 'cultural referencing system that provides pleasures for filmgoers as well as pre-sold forms for risk-averse industries' (Miller *et al.*: 2001: 95). Genres are relatively stable sets of cultural schemas that provide standardized templates for decision making by producers; collectively define the market space for films and enable distributors to establish the identity of a film within a market; and 'help render individual films, and the elements within them, intelligible and, therefore, explicable' to audiences (Neale 2000: 31). At the same time, genres are dynamic categories subject to fluctuations in audience tastes, giving rise to short-term cycles and longer-term production trends across the film industry as genres pass in and out of fashion.

Wheeler Winston Dixon writes that one of the key characteristics of contemporary Hollywood cinema is its 'apparent facelessness, its desire to subsume itself into the larger framework of genre cinema, and not to identify each film as a unique exemplar' (2000: 1). This paper presents a survey of genre trends in among the top 50 films at the US box office in each year from 1991 to 2010, inclusive in order to understand how genre has shaped the

film market in the US. Specifically, I focus on the frequency with which films from different genres achieved the highest box office rankings over this time period, and I examine the trends within these rankings to identify patterns of growth or decline in particular genres. I also examine these films as a single group to identify differences in box office performance and release patterns between different genres; and to determine if there is any evidence of genre specialization by studios in contemporary Hollywood. The next section discusses the function of genre in the film industry, and presents an overview of research in the economics of genre in Hollywood cinema and links these to existing conceptions of Hollywood as a generic cinema in film studies. Section three describes the sample employed in the study and outlines the statistical methods employed; and the results of this analysis are presented and discussed in section four.

2. The function of genre in the Hollywood film industry

Genres can be viewed as ‘formulas that precede and model cultural industry production, the formal framework on which individual products are founded’ (Perretti & Negro 2007: 564). For producers, this framework provides a template for decision making and the relative stability of genres enables studios to standardise production practices. At the same time, there are high demands placed on innovation in order to ensure repeat consumption due to the rapid obsolescence of cultural products, and genre innovation is ‘fundamental for sustaining demand, product variety, and differentiation’ (Perretti & Negro 2007: 564). Genre is a ‘cultural toolkit’ that allows filmmakers to envision new cultural products by building upon existing sets of artistic and narrative conventions (Jensen 2010), and thereby provides a privileged form of communication between aesthetic personnel based upon pre-existing modes of expression (Altman 1996). Genre thus enables producers to overcome the contradictory requirements that,

on the one hand their product must be sufficiently inventive to attract attention and satisfy the audience’s demand for novelty, and on the other hand, they must protect their initial investment by relying to some extent upon established conventions that have proven through previous exposure and repetition (Schatz 1981: 5).

This effect has been directly observed in contemporary Hollywood cinema. Desai and Basuroy (2005) found that genre familiarity can mitigate risk factors in decision making (such as the casting of stars) and the impact of critical reviews. Studying Hollywood films released in 1991-1993 and 1999-2000, they found that for more familiar genre movies (e.g. drama and comedy), star power and the valence of critics’ reviews have less impact on the movie’s performance in the market. In contrast, for the less familiar genre movies (e.g. science fiction and foreign films), stronger (vs. weaker) star power and more (vs. less) positive reviews have positive influence on the market performance.

The decisions of producers are also affected by the recent box office history of particular genres, and studios will behave paradoxically as they simultaneously diversify their product in order to establish a unique identity in the market place, whilst also following a production cycle so as to avoid missing out on the current popularity of a particular genre. Genre is also a factor in decision making regarding the timing of a film’s release. Foutz and Kidiyali (2003) examined the role of genre played in the competitive dynamics of releasing motion pictures, and found that studio managers try to avoid head-to-head competition with movies of the same genre because having one same-genre competitor that targets the same weekend for release is almost as damaging to a film’s performance as having two competitor movies of different genres targeting that weekend. Similarly, Ainslie *et al.* (2005) also found that

releasing a movie contemporaneously with others of the same genre adversely affects box office performance all around in both the short- and long-term.

For distributors, genre is the conceptual framework that shapes the film market by providing a set of product categories that allow individual films to be endowed with identity. Michael Jensen describes the dimensions of a market space for films in terms of product categories that provide information to audiences about types of product; and status categories that function as indicators of quality, and includes, principally, the presence of stars, along with budget, awards, and critical reviews. A film is assigned to a product category (i.e. genre) based on whether the combination of genre elements makes the film more prototypical of one genre than another, and its market identity is determined by extracting core genre elements and combining them in the promotional material for a film (Jensen 2010: 43-45). A film genre can therefore be described as being composed of 'genre elements that enable and constrain the construction of individual film identities, whereas a film market is composed of different genres that collectively define the horizontal dimensions of the market space' (Jensen 2010: 43).

The genre of a film provides an audience with a first reference point, and research indicates that genre is an important – if not the most important – factor in decision making for audiences about which film to see (Litman 1983, Da Silva 1998). Hennig-Thurau *et al.* (2001) describe genre as a quasi-search characteristic through which the consumer tries to evaluate traits he or she is actually unable to evaluate without having seen the movie: 'The consistency within a genre allows the viewer familiar with the rules determining genre to infer motifs as regards content and structure, without having to watch the movie (in its entirety) in advance.' The construction and dissemination of a *narrative image* for a film, which serves as 'the cinema's anticipatory answer to the question, "What is the film like?"' (Ellis 1981: 30), is central to this process. Genre is the most important element of the narrative image of a film (Neale 2000: 39); and is established by identification devices such as genre labels, iconography, and the presence of particular producers, directors, writers, and stars associated with a specific class of films. This identity is circulated via advertising and marketing materials (e.g. posters, trailers, electronic press kits), critical reviews, and 'unofficial' discourses (e.g. word-of-mouth, fan culture) (Lukow & Ricci 184, Liu 2006). A possible explanation for this function of genre is that movie audiences store information at the level of genre rather than at the level of individual movies due to the product categories having many rather than few brands (e.g. individual movies) with no unambiguous reference brand. Consequently, audiences form experience-based norms at an aggregate (i.e. generic) rather than at a specific level (Desai & Basuroy 2005: 206). By making generic information available, the film industry alerts viewers who have enjoyed a film that similar pleasures are available, indicates to its potential audience what to expect when going to see a particular film and what knowledge of the cinema to employ in a watching film, and seeks to avoid misunderstandings that might contribute to audience dissatisfaction. Genre is therefore crucial in an industry where 'consumers need familiarity to understand what they are offered, but they need novelty to enjoy it' (Lampel *et al.* 2000: 292).

Despite the key role genre plays in the film industry, there is a surprising lack of analyses of genre trends in Hollywood cinema over time. Film studies has produced many studies of movies genres and examined the evolution of their themes, formal properties, status, etc.; but has failed to provide a statistical overview of the short- and long-terms trends of the frequency and popularity of film genres. Economic researches on genre trends in the film industry are also rare, though some national film agencies (e.g. the BFI) do collect data about genre and box office gross. Two studies of contemporary Hollywood filmmaking by Lu *et al.*

(2005) and Ji and Waterman (2010) analysed the frequency of different genres among the top 20 grossing films at the US box office from 1967 to 2008. They found that the five most frequently occurring genres were action, adventure, comedy, thriller, and drama; and that all but the last of these had increased in frequency at the highest box office rankings over the time period studied. Drama films, by contrast, declined from being the most frequently occurring of these genres in 1967-1971 to the least frequently occurring in the period 2002-2004. The frequency of westerns, war films, musicals and romance films also decreased; whereas the genres of science fiction and animation have increased in popularity. This represents the increasing dominance of 'technology-friendly' films that rely heavily on special-effects technology in general, and computer generated imagery in particular, at the US box office; and a decline in the share of box office achieved by character- and narrative-driven films (see also Wang 2011).

In presenting a statistical analysis of genre trends and box office grosses of contemporary Hollywood cinema, this paper aims to fill this gap in our knowledge by systematically studying the trends in the frequency and financial performance (and by extension the popularity) of genres in the US film market. The next section describes the sample of films studied and the methods employed, and section four presents the results of this analysis.

3. Data description and statistical methods

The sample analysed here is comprised of the top 50 grossing motion pictures at the US box office in each year from 1991 to 2010, inclusive, giving a total sample size of 1000 films. The data were obtained from Box Office Mojo at <http://boxofficemojo.com/>, and the data set contains the name, studio, opening weekend gross, and total gross for each film.

Each film is assigned to one – and one only – of nine genres: action/adventure, comedy, crime/thriller, drama, family, fantasy/science fiction, horror, romance, and other. The category 'other' includes films from genres that occur infrequently across the time period covered, and includes documentaries (including IMAX films), musicals, war films, and westerns. The category 'other' is included in the figures and tables below but will not generally be included as part of the analysis as this category is composed of four different sub-genres and it makes little sense to speak of trends or correlation between variables in such a heterogeneous category. Genre labels were applied once all the data had been collected in order to ensure consistency over the whole time period covered, and were not adopted from external sources where the methodology of genre labelling may have changed over time (see Ji and Waterman (2010)).

The trend in the time series of the frequency with which a genre occurs in each year is described by a linear ordinary least squares (OLS) model, $y = at + b$, where a and b are the slope and intercept, respectively, and the independent variable t is the year of release. The correlation coefficient is given as a measure of the strength of this trend. The time series data is further broken down to show the number of films in each genre in the top 50 by decade (1991-2000 and 2001-2010); and the box office rankings are further decomposed to show the number of films to make it into the top 25 and the top 10 from each genre in each decade. The rank of a film in the top 50 of a year is determined by its total box office gross, with the highest grossing film giving a rank of 1, the next highest ranked 2, and so on.

For comparison across the whole time period, box office grosses were adjusted for inflation to 2010 dollars based on the Consumer Price Index data from the US Department of Labour's Bureau of Labour Statistics at <http://www.bls.gov/cpi/>. As the distribution of box office

grosses tends to be positively skewed due to the presence of large outlying values (Walls 2009), this data is described by a non-parametric seven-number summary including the extremes, the quartiles, and the 5th and 95th percentiles. Films were also ranked by their total and opening weekend grosses as before from the highest grossing to the lowest having been pooled to form a single large sample containing all 1000 films. The relationship between the ranks of a film's opening and total gross was assessed using the correlation coefficient; and trendlines were fitted to this data using reduced major axis (RMA) regression in order to allow for the fact that both grosses are subject to the influence of several random factors, though neither variable is in fact measured with error.

4. Genre trends at the US box office

4.1 Genre frequency and ranking by year

Table 1 lists the number of films in each genre in the sample, along with a breakdown of the data by decade, along with the OLS regression statistics for the trendlines in the time series presented in Figure 1. The most frequently occurring genres in the sample are comedy, family, and action/adventure, which account for just over half the total sample of films. The genres of crime/thriller, drama, and fantasy/science fiction occur less frequently but nonetheless form a major part of the Hollywood box office. Horror films are much less common, and there are two years (1995 and 2008) with no films from this genre ranked in the top 50. With 70 films, the romance genre is also relatively uncommon, but unlike horror, films from this genre did rank in the top 50 in each year. The category 'other' includes 9 documentaries, 10 musicals (including concert films), 13 war films, and 6 westerns.

Figure 1 presents the time series of the number of films in each genre in the top 50 grossing films for each year. Earlier research has indicated that comedy and drama films have historically been more popular with viewers than the genres of art, science/fiction, foreign, and action (Desai & Basuroy 2003). However, it is clear from the results presented here that, since the early 1990s, there has been an upwards trend in the number of fantasy/science fiction films along with marginal increases in the genres of action/adventure and family, in the top 50; and a decline in the number of crime/thriller and drama films. Despite a sharp fall in the mid-1990s after a strong start to the decade, the number of comedy films has remained stationary and the number of top 50 was 10 or greater in 12 of the years covered. The genres of horror and romance show no overall trend. The peaks of 1999 and 2005 in the number of top 50 films for the horror genre may indicate some cyclical effect as the genre passes in and out of fashion. The peak years for the romance film are 1998 and 1999, the years immediately after *Titanic* (1997), which (adjusting for inflation) is the highest grossing film in the sample, and may represent attempts by producers to follow-up the phenomenal commercial success of this film by attracting the same audience. However, there is no similar preceding event that may account for the later peak in the years 2008 and 2009, and so this genre too may be subject to the vagaries of public taste.

Figure 2 shows the frequency of films in each genre ranking in the top 25 and top 10 films. Action/adventure and family films exhibit marginal upwards trends in both subdivisions of the top 50 indicating an increase in the number of these films to achieve the highest rankings; but, taking into account the small increase evident in Figure 1, the proportion of films in each genre to make the top 25 and top 10 has remained constant. Although there is no obvious trend for fantasy/science fiction films, it is clear that in the second decade covered by the sample that this genre has become a stable fixture of the upper reaches of the US box office. From the breakdown by decade in Table 1, we see that the proportion of

fantasy/science fiction films in the top 25 films has increased from 51% to 64% and with an increase from 26% to 50% for top 10 films; and in 2005 alone, fantasy/science fiction films occupied six of the top 7 rankings by total gross. With a total of 37 films, fantasy/science fiction films account for 19% of the films to achieve a top 10 ranking even though they account for only 9% of the total sample, and these figures are 28% and 11%, respectively, for the 500 films released in the decade 2001 to 2010. Fantasy/science fiction films are therefore overrepresented at the highest rankings.

Not only has there been decline in the number of crime/thriller and drama films to make the top 50, the number of films to achieve the highest rankings has also declined steadily from 1991 to 2010. Since 2001, only five crime/thriller films have made the top 10, of which two were from the same franchise (*The Bourne Ultimatum* in 2004 and *The Bourne Supremacy* in 2007); and compared to the decade 1991-2000, the proportion of these films to make the top 10 has fallen from 20% to 10%. Drama films never dominated the top 10, but it is clear that these films have become less frequent at the top of the rankings over time. From 1991 to 2000, there were 9 films ranked in the top 10, compared to just 3 from 2001 to 2010. Taking into account the overall decline in the frequency of drama films, the proportion of drama films to make it into the top 10 has also fallen by half. The decrease in the number of drama films to make it to the top of the box office rankings supports the results in Lu *et al.* (2005) and Ji and Waterman (2010) that this genre has experienced a long-term decline since the late-1960s. However, there is no evidence to support the claim that thrillers have become increasingly frequent at the top of the charts, though this may reflect the different ways in which films are classified by genre in each study, along with the different time periods and different number of films from each year covered.

Allowing for the small drop in the number of comedy films in the top 50, the proportion of comedy films in the top 25 has remained constant at just under 50% in each of the decades covered here. In contrast, there has been a sharp decline in the proportion of comedy films achieving top 10 rankings from 14% to 7%. The proportion of comedy films to achieve top 10 rankings has, therefore, also halved, with the downward trend more pronounced in the final five years of the sample: comedy films failed to register a top 10 ranking in only one year prior to 2006, but from 2006 on there have been no top 10 comedy films in four of the five years and only a single film (*The Hangover*) in 2009. Consequently, we can say that these films remain as numerous as before but that they have fallen down the rankings.

Horror and romance films exhibit no particular trend over time, and this is largely due to the low frequency with which they rank in the top 50. The number of horror films to register in the top 25 films has fallen by half from 14 in 1991 to 2000 to 7 between 2001 and 2010; while the number of films has remained constant from one decade to the next, and no film from this genre has made the top 25 since 2005. It is rare that a horror film should achieve a top 10 ranking, with only four films in the sample doing so. High ranking romance films are also rare at the US box office: only eleven films ranked in the top 10, although this does include *Titanic*. Of these 11 films, 7 were released prior to 2001 and four were released since that year; and there has been no top 10 romance film in six of the ten years from 2001. There is no trend in the number of romance films achieving top 25 rankings over the two decades. As the category 'other' is comprised of four different genres it makes little sense to speak of trends in the rankings of these films, but it is worth noting that *Saving Private Ryan* was the highest grossing film in the US in 1998. *Pearl Harbor* ranked 7th in 2001 and *Chicago* 10th in 2002, while no other films made it into the top 10. The frequency of top 25 films for this category is also low.

4.2 Genre and box office gross

The domination of the US box office by a narrow range of genres is also evident in the number one ranking positions in each year, and in the top 20 grossing films from the whole sample of 1000 films. Table 2 lists the highest grossing film in each year. Of these, eight are fantasy/science fiction films, though many other films also have strong fantasy or science fiction elements. For example, *Shrek 2*, *Aladdin*, and *How the Grinch Stole Christmas* are classed here as family films but could clearly also be considered as fantasy films; while many of the action/adventure films (*Spiderman*, *Spiderman 3*, *The Dark Knight*) have a strong science fiction theme. Table 3 lists the 20 highest grossing films in the sample across the whole period, and of these eight are fantasy/science fiction films. The genres of action/adventure and family films account for 5 and 4 films, respectively; though again we could point to fantasy and science fiction components in many of these films.

The 1000 films in the sample accumulated a total gross of \$128,710.7 million, of which the opening weekends of the films account for \$29,691.9 million. Tables 4 and 5 give the breakdown of this gross by genre, and it is again obvious that action/adventure and fantasy/science fiction films are the highest grossing films on both measures. The distribution of the total grosses for family films are consistent with the above two genres; but this is not the case for opening grosses, which are similar to those of the comedy, crime/thriller, and romance genres. The total grosses for horror films are consistent with these four genres, but they do tend to have slightly bigger opening weekends. Looking at the distribution of the total grosses of drama films in Table 4, we note that although they tend to be slightly lower than the comedy, crime/thriller, horror, and romance genres, they are not substantially different. This is not the case for the opening grosses, which tend to be much smaller than for other types of films. In every category there are some films that are released onto a small number of screens for their opening weekend, but the number of such films is typically small (i.e. less than \$1 million). This is especially the case for the genres of action/adventure (1 film) and fantasy/science fiction (2 films). In contrast, this type of release is a particular characteristic of the drama films, 33 of which have opening weekends of less than \$1 million.

These relationships are easier to visualise by plotting the ranks of the opening and total grosses, and can be seen in Figure 3. The RMA regression statistics and the median ranks for this data are set out in Table 5. The opening weekend is frequently used to predict the total gross of a film, and there is a significant correlation between these two measures for each category of films. However, there is evidence of clustering away from the main body of data and any correlation needs to be interpreted with this in mind.

The dominance of the upper reaches of the US box office by fantasy/science fiction film is immediately obvious from Figure 4 (f), with the dense cluster in the bottom left-hand corner of the graph. The large difference between the median ranks for these films shows that these films are nearer to the top of the rankings for their opening weekend and then fall away over time, although the total gross median rank is still well within the top half of the sample. The action/adventure (Figure 4 (a)) genre has a similar cluster of films with high ranks on both measures, but is also more spread out over the lower rankings. The median ranks are again in the top half of the sample, and there is a smaller decline than is evident in the fantasy/science fiction genre. These two genres have the strongest correlation between the ranks of opening and total gross, and the opening weekend rank is a reliable predictor of the total gross rank. In Figure 4 (e), family films cluster in the bottom left quadrant, indicating high grossing films, and in the upper right quadrant, indicating films that perform less well overall at the box office. There is a further group of films that have very small opening

weekends but rank much higher in terms of their total gross, and these films are all animated films released by Buena Vista. The six films are *Beauty and the Beast* (1991 – opening gross rank = 967/total gross rank = 97), *Aladdin* (1992 – 959/28), *The Lion King* (1994 – 919/9), *Pocahontas* (1995 – 914/142), *A Bug's Life* (1998 – 948/117), and *Toy Story 2* (1999 – 947/42). The difference between these ranks shows these films were initially released to a small number of screens before receiving a wider release, but this does not represent a particular distribution pattern among family films in general or for Buena Vista in particular. Only 10 films in this genre have opening grosses of less than \$1 million; and neither *Toy Story* (1995) nor *Toy Story 3* (2010) were released in this way, the latter film having the 17th highest opening weekend of the 1000 films in the sample. The greater variability in the data for the Family genre explains the lower correlation coefficient.

From Figure 4 (d), we see that drama films tend to have low rankings for both the opening and total grosses within the overall sample – only 22 of these films have an opening weekend rank in the top half of the sample. A further notable feature is the cluster of films in the lower right quadrant of the graph which have low opening weekends but achieve high gross rankings. This cluster includes Academy Award-winning films such as *Schindler's List* (1993 – 927/280) *Good Will Hunting* (1997 – 950/167), *American Beauty* (1999 – 925/207), *A Beautiful Mind* (2001 – 943/134), and *The King's Speech* (2010 – 952/322); along with Oscar nominated films such as *Fried Green Tomatoes at the Whistle Stop Cafe* (1991 – 984/340) and *Mr Holland's Opus* (1995 – 999/403), and other films including *Gran Torino* (2008 – 963/260). Earlier research has shown that Academy awards can make a significant difference to the income of a film (Dodds & Holbrook 1998), and the prevalence of Oscar winners and nominees in this cluster of films indicates that this effect is relevant to drama films. The large difference between the median ranks also indicates that drama films typically have low opening rankings but improve their standing over time; and the relatively lower correlation between the ranks means that the opening weekend gross is less reliable as a predictor of total gross. These results indicate that many drama films are characterised by a particular release pattern of an initially small number of prints being put into distribution and allowing the audience to build slowly by word of mouth that is not replicated for the other genres.

The horror genre demonstrates the opposite trend to the drama film. Figure 4 (g) shows that that the data points are densest in the upper left quadrant, indicating lower ranks for the opening weekend and higher ranks for the total gross. We see a large difference in the median ranks, and this points to the importance of the opening weekend gross for these films which accounts for a before the gross falls away sharply overtime. The correlation coefficient is similar to that of drama films, and again we conclude that the opening gross ranking is not a reliable predictor of the total gross ranking, albeit for the opposite reason: for drama films the opening gross ranking would lead us to underestimate the performance of a film over its period on release, whereas for the horror genre we would overestimate a film's success. The plots for the comedy, crime/thriller, and romance genres reveal no particular trend. The median ranks for the comedy and crime/thriller films show little difference between the opening weekend and total grosses, although the difference in the median ranks does indicate some improvement for romance films after the opening weekend. However, this effect is smaller than for other genres. The correlation coefficients for these films are consistent with that of the family genre, but there is no similar clustering effect.

There are clear differences in release patterns and box office success between genres. Overall, this data supports the conclusions of Simonoff and Sparrow (2000) that genre is

predictive of box office gross for action/adventure and fantasy/science fiction, and that Academy Award nominations and wins can provide a boost to box office revenues; while the effect for family films is less conclusive than expected. There is no evidence to support the argument that horror films achieve noticeably higher revenues in general. In fact, the data indicates just the opposite. The data for the horror film also indicates that we should be wary of relying on opening gross as a predictor of total gross: like the action/adventure and fantasy/science fiction genres, these films are heavily dependent upon their opening weekend but without sustained success over the remainder of a film's release. This would account for the difference in the median ranks and correlation coefficients between these genres.

4.3 Genre and Hollywood studios

Historically, particular movie studios were often associated with a specific genre of filmmaking as a strategy of differentiating their product in the marketplace (e.g. MGM and musicals, Universal and horror films, Warner Bros. and gangster films), whilst also ensuring that their product was sufficiently diverse to mitigate changes in audience taste and fashion. Table 7 lists the number of films in each genre released by Hollywood studios and it is clear from the data that there is no evidence of genre specialisation among five of the six major studios (Fox, Paramount, Sony, Universal, and Warner Bros.). Fox has released fewer crime/thriller films than the other major studios, while releasing a greater number of fantasy/science fiction films. Paramount and DreamWorks have co-released 10 family films, which accounts for their number of releases in this category being lower for Paramount than for the other major studios. The exception for the major studios is Buena Vista, its output dominated by and dominating the genre of family films. Of the 162 films released by the studio to make it into the top 50 between 1991 and 2010, 44% were family films; and this one firm accounts for 43% of the 164 films of this genre in the sample. This result is unsurprising, since Buena Vista is the releasing arm of the Walt Disney Corporation and reflects the corporate image of that company as a producer of safe, wholesome, family entertainment (Wasko 2001). Buena Vista has also diversified its product and the frequency with which it has released other types of film is generally consistent with the other majors, although it has released fewer crime/thriller films compared to most of the other studios.

The six majors account for a total of 778 films in the sample; and many of the smaller firms listed operate within their orbit. New Line was a part of the Time-Warner media conglomerate from 1993 until it merged with Warner Bros. in 2008; and DreamWorks has entered into production and/or distribution arrangements with Paramount and Disney. The only film amongst the highest grossing in Tables 2 and 3 not connected to one of the major media conglomerates is Newmarket's *The Passion of The Christ* (2004), which was produced and distributed outside the traditional Hollywood mechanisms (Maresco 2004). Looking at the smaller firms in Table 7, we see that New Line's output is dominated by comedy films, although its most profitable films were the *Lord of the Rings* trilogy; while half of MGM's limited output is accounted for by action/adventure (and four these five films are from the James Bond franchise), comedy, and crime/thriller films. Few films from the action/adventure and fantasy/science fiction genres are produced by firms other than the major studios. The budgets for these types of films tend to be higher than those of other genres, and this level of capital investment is typically beyond the scope of all but the largest studios.

5. Conclusion

This paper has presented an empirical analysis of genre trends at the US box office in the two decades since 1991. Overall, analysis of box office data indicates that the range of genres for the highest grossing films at the US box office has become narrower over the past twenty years. A limited range of special effects-based films from the action/adventure and fantasy/science fiction genres have come to dominate the US box office at the expense character- and narrative-driven films (crime/thriller and drama films) that were previously identified as the most popular. Although this has been widely noted by film critics and scholars before, this paper has quantified this shift in clear and simple terms. We identified different genres as being characterized by different release patterns, and noted the importance of awards in contributing to the box office gross of drama films. We also found that, with one notable exception, there is no evidence of genre specialization among film studios in contemporary Hollywood cinema.

Future research in this area may be extended to include two further aspects. First, this paper does not take into account the importance of revenue streams from video/DVD/Blu-Ray sales and rentals over the same time period, and so does not include a large part of the US market that determines the success of a film. As films continue to be in circulation for years in ancillary markets rather than the weeks they spend on general release in theatres incorporating this data will allow us to understand the long-term stability of a film's generic identity. Second, this paper has focussed on genre trends at the American box office only. To develop this research further will require the adoption of a comparative approach, looking at genre trends across a range of different film markets. Given that the theory of national cinemas is as central to film studies as genre, it is also surprising that there have been no comparative studies looking at the box office performance of different genres in different countries. Though there are some studies comparing production trends in different countries based on genre (Wang 2011) or examining the performance of Hollywood films in individual foreign markets (Hennig-Thurau *et al.* 2004, Elliott & Simmons 2008, Lee 2008), there have been no large scale comparative studies of genre trends and the international dimension of this research remains unexplored.

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Genre trends at the US box office, 1991 to 2010

Table 1 Sample size, breakdown by decade, and OLS regression statistics for Figure 1

	n	1991 – 2000 (top 25/top 10)	2001 – 2010 (top 25/top 10)	r	p	Slope	Intercept
Action/Adventure	155	72 (40/18)	83 (47/25)	0.44	0.05	0.16	-315.64
Comedy	199	104 (50/20)	95 (42/8)	-0.30	0.20	-0.12	252.12
Crime/Thriller	126	75 (37/15)	51 (22/5)	-0.70	< 0.01	-0.28	568.85
Drama	109	66 (29/9)	43 (16/3)	-0.61	< 0.01	-0.25	497.30
Family	164	73 (42/18)	91 (56/24)	0.41	0.07	0.14	-265.55
Fantasy/Science Fiction	91	35 (18/9)	56 (36/28)	0.55	0.01	0.21	-418.11
Horror	49	25 (14/3)	24 (7/1)	0.04	0.85	0.01	-26.13
Romance	70	36 (13/7)	34 (15/9)	0.14	0.57	0.03	-65.69
Other	37	14 (7/1)	23 (9/2)	0.39	0.09	0.09	-177.14

Genre trends at the US box office, 1991 to 2010

Table 2 Top-grossing film in each year at the US box office, 1991 to 2010

Year	Title	Studio	Total Gross (\$ million)*	Genre
1991	Terminator 2: Judgment Day	Tri-Star	327.95	Fantasy/Science Fiction
1992	Aladdin	Buena Vista	337.76	Family
1993	Jurassic Park	Universal	538.82	Fantasy/Science Fiction
1994	Forrest Gump	Paramount	484.98	Drama
1995	Toy Story	Buena Vista	274.46	Family
1996	Independence Day	Fox	425.58	Fantasy/Science Fiction
1997	Titanic	Paramount	816.47	Romance
1998	Saving Private Ryan	DreamWorks	289.73	Other (War)
1999	Star Wars: Episode I - The Phantom Menace	Fox	564.29	Fantasy/Science Fiction
2000	How the Grinch Stole Christmas	Universal	329.22	Family
2001	Harry Potter and the Sorcerer's Stone	Warner Bros.	390.94	Fantasy/Science Fiction
2002	Spider-Man	Sony	489.29	Action/Adventure
2003	The Lord of the Rings: The Return of the King	New Line	446.78	Fantasy/Science Fiction
2004	Shrek 2	DreamWorks	509.18	Family
2005	Star Wars: Episode III - Revenge of the Sith	Fox	424.76	Fantasy/Science Fiction
2006	Pirates of the Caribbean: Dead Man's Chest	Buena Vista	458.03	Action/Adventure
2007	Spider-Man 3	Sony	354.03	Action/Adventure
2008	The Dark Knight	Warner Bros.	540.28	Action/Adventure
2009	Avatar	Fox	761.76	Fantasy/Science Fiction
2010	Toy Story 3	Buena Vista	415.00	Family

*Inflation adjusted to 2010 dollars

Genre trends at the US box office, 1991 to 2010

Table 3 Top-20 grossing films at the US box office, 1991 to 2010

Rank	Title	Studio	Year	Total Gross (\$ million)*	Genre
1	Titanic	Paramount	1997	816.47	Romance
2	Avatar	Fox	2009	761.76	Fantasy/Science Fiction
3	Star Wars: Episode I - The Phantom Menace	Fox	1999	564.29	Fantasy/Science Fiction
4	The Dark Knight	Warner Bros.	2008	540.28	Action/Adventure
5	Jurassic Park	Universal	1993	538.82	Fantasy/Science Fiction
6	Shrek 2	DreamWorks	2004	509.18	Family
7	Spider-Man	Sony	2002	489.29	Action/Adventure
8	Forrest Gump	Paramount	1994	484.98	Drama
9	The Lion King	Buena Vista	1994	460.21	Family
10	Pirates of the Caribbean: Dead Man's Chest	Buena Vista	2006	458.03	Action/Adventure
11	The Lord of the Rings: The Return of the King	New Line	2003	446.78	Fantasy/Science Fiction
12	Spider-Man 2	Sony	2004	431.12	Action/Adventure
13	The Passion of the Christ	Newmarket	2004	427.30	Drama
14	Independence Day	Fox	1996	425.58	Fantasy/Science Fiction
15	Star Wars: Episode III - Revenge of the Sith	Fox	2005	424.76	Fantasy/Science Fiction
16	Toy Story 3	Buena Vista	2010	415.00	Family
17	The Lord of the Rings: The Two Towers	New Line	2002	411.83	Fantasy/Science Fiction
18	Transformers: Revenge of the Fallen	Paramount/DreamWorks	2009	408.55	Action/Adventure
19	Finding Nemo	Buena Vista	2003	402.56	Family
20	Harry Potter and the Sorcerer's Stone	Warner Bros.	2001	390.94	Fantasy/Science Fiction

*inflation adjusted to 2010 dollars

Genre trends at the US box office, 1991 to 2010

Table 4 Total box office gross by genre at the US box office, 1991 to 2010 (\$ millions*)

	Action/ Adventure	Comedy	Crime/Thriller	Drama	Family	Fantasy/ Science Fiction	Horror	Romance	Other
N	155	199	126	109	164	91	49	70	37
Total Gross	22,824.03	21,873.77	13,849.10	11,738.23	23,452.89	17,141.00	5,277.51	8,574.77	3,979.43
Minimum	41.46	39.01	44.36	40.35	42.40	49.88	40.08	45.32	54.31
5th percentile	50.24	51.81	55.05	53.36	54.05	67.31	54.41	54.70	56.25
25th percentile	77.10	72.66	74.93	67.51	80.45	81.49	70.74	70.81	72.45
Median	121.82	92.63	93.18	86.93	118.55	127.92	89.54	92.00	86.50
75th percentile	179.77	134.61	135.51	121.94	186.31	278.85	128.24	146.64	125.05
95th percentile	335.89	216.16	217.83	224.31	328.11	425.17	191.68	265.09	214.38
Maximum	540.28	322.27	277.47	484.98	509.18	761.76	384.20	816.47	289.73

*Inflation adjusted to 2010 dollars

Genre trends at the US box office, 1991 to 2010

Table 5 Opening weekend box office gross by genre at the US box office, 1991 to 2010 (\$ millions*)

	Action/ Adventure	Comedy	Crime/Thriller	Drama	Family	Fantasy/ Science Fiction	Horror	Romance	Other†
N	155	199	126	109	164	91	49	70	36
Total Gross	6,647.94	4,999.21	3,132.50	1,664.42	4,955.85	4,461.27	1,436.87	1,701.26	692.57
Minimum	0.84	0.14	0.09	0.02	0.09	0.25	0.08	0.20	0.15
5th percentile	13.60	7.92	6.95	0.15	0.46	17.37	4.55	0.33	0.21
25th percentile	21.59	15.01	16.43	0.56	15.48	27.05	20.87	13.23	2.80
Median	33.32	22.46	22.99	15.28	25.54	40.33	26.93	20.80	21.02
75th percentile	56.18	32.57	29.09	22.97	41.63	70.33	39.17	29.23	27.73
95th percentile	104.43	53.18	49.74	36.45	69.65	109.95	56.55	57.10	41.33
Maximum	160.47	88.56	83.39	96.76	127.95	125.02	72.86	145.12	72.73

*Inflation adjusted to 2010 dollars.

† No opening weekend gross was listed for one documentary.

Genre trends at the US box office, 1991 to 2010

Table 6 Median gross ranks and RMA regression statistics for Figure 3

	n	Opening gross median rank	Total gross median rank	<i>r</i>	p	Slope	Intercept
Action/Adventure	155	301	385	0.87	< 0.01	1.11	38.71
Comedy	199	550	548	0.69	< 0.01	1.06	-27.11
Crime/Thriller	126	535	546	0.65	< 0.01	1.10	-54.00
Drama	109	764	607	0.50	< 0.01	1.11	-204.64
Family	164	453	400	0.68	< 0.01	0.97	-36.23
Fantasy/Science Fiction	91	223	355	0.85	< 0.01	1.24	20.56
Horror	49	417	581	0.35	< 0.01	1.02	105.75
Romance	70	610	557	0.66	< 0.01	1.02	-54.92
Other	37	610	617	0.39	0.02	0.92	-24.20

Genre trends at the US box office, 1991 to 2010

Table 7 Number of films in each genre released by Hollywood studios, 1991 to 2010 (minimum of 20 releases)

	Action/ Adventure	Comedy	Crime/ Thriller	Drama	Family	Fantasy/ Science Fiction	Horror	Romance	Other	Total
Buena Vista	19	19	9	15	71	8	4	9	8	162
DreamWorks	1	6	4	3	10	1	4	1	1	31
Fox	21	24	9	8	22	20	1	9	2	116
MGM	5	8	4	2	0	2	2	0	0	23
Miramax	2	2	4	7	1	0	2	4	2	24
New Line	4	16	4	1	2	7	4	1	1	40
Paramount	15	29	24	10	10	13	3	6	3	113
Paramount/Dreamworks	2	5	2	0	10	1	0	0	2	22
Sony*	24	24	19	23	8	9	7	11	1	126
Universal	24	27	16	16	11	8	2	7	3	114
Warner Bros.	31	24	26	12	15	18	7	10	4	147
Others	7	15	5	12	4	4	13	12	10	82
Total	155	199	126	109	164	91	49	70	37	1000

* Includes Columbia-TriStar

Genre trends at the US box office, 1991 to 2010

Figure 1 Time series of the number of top 50 grossing films at the US box office in each genre, 1991 to 2010, with OLS trendline



Genre trends at the US box office, 1991 to 2010

Figure 2 Time series of the number of films in each genre to achieve top 25 (solid line) and top 10 (dotted line) rankings at US box office, 1991 to 2010

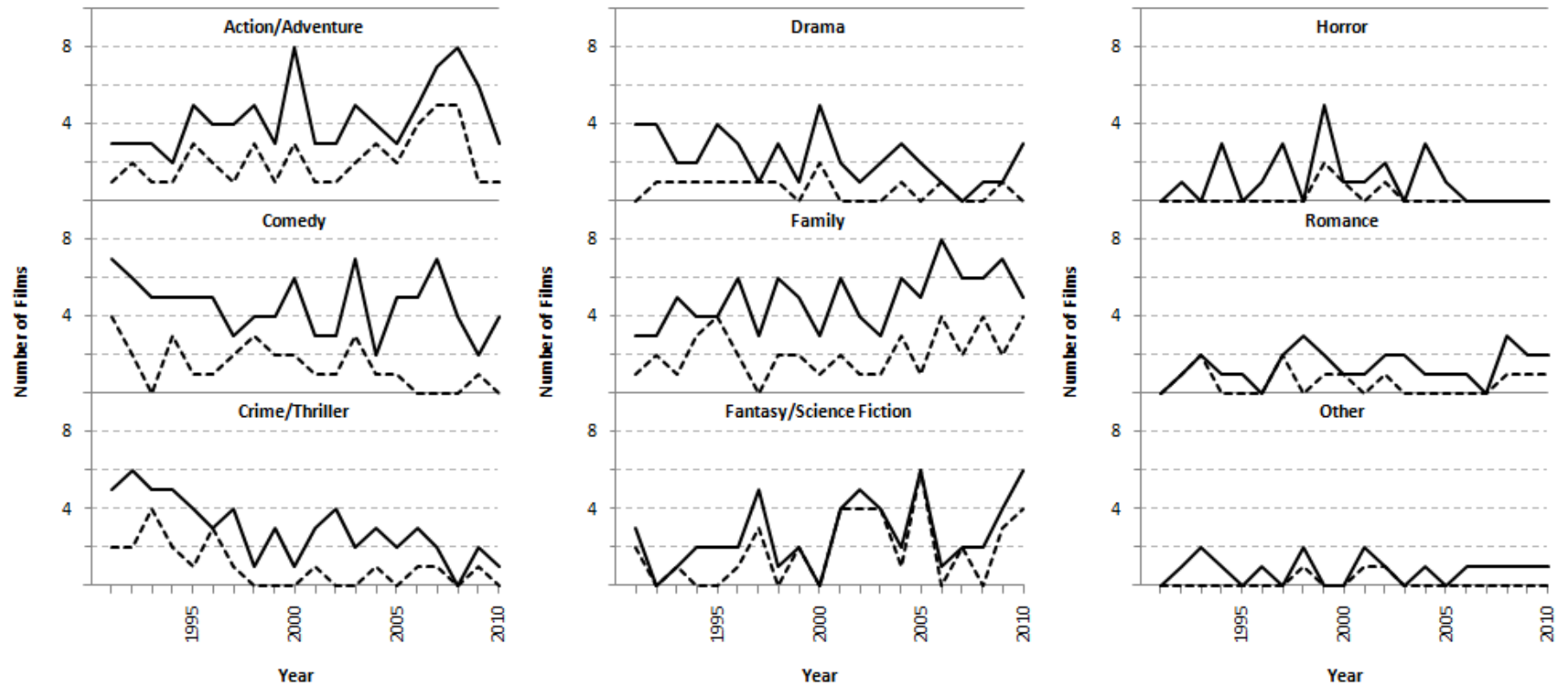


Figure 3 Opening gross and total gross ranks of films in each genre at the US box office, 1991 to 2010, with RMA trendline

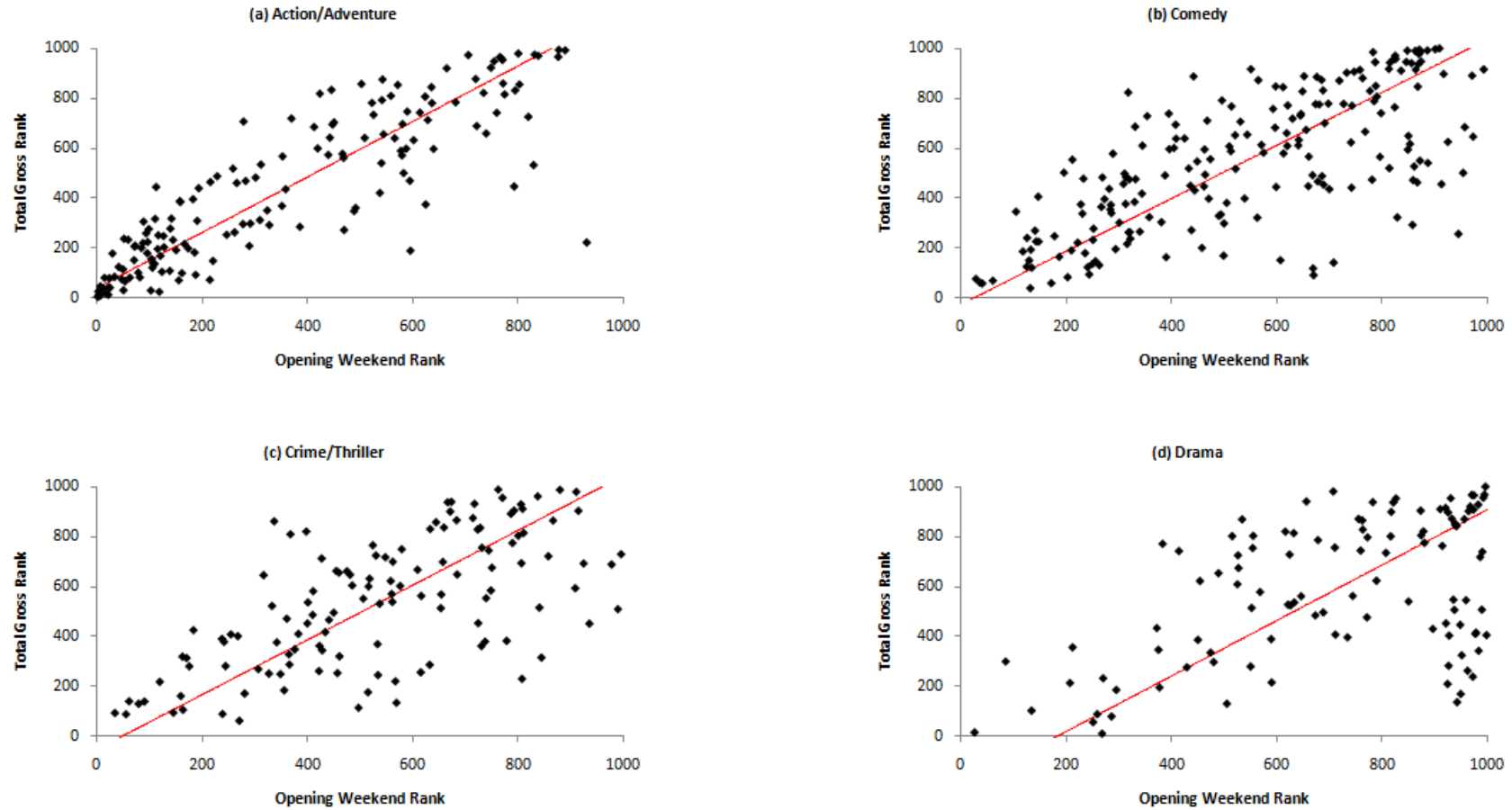


Figure 3 (continued) Opening gross and total gross ranks of films in each genre at the US box office, 1991 to 2010, with RMA trendline

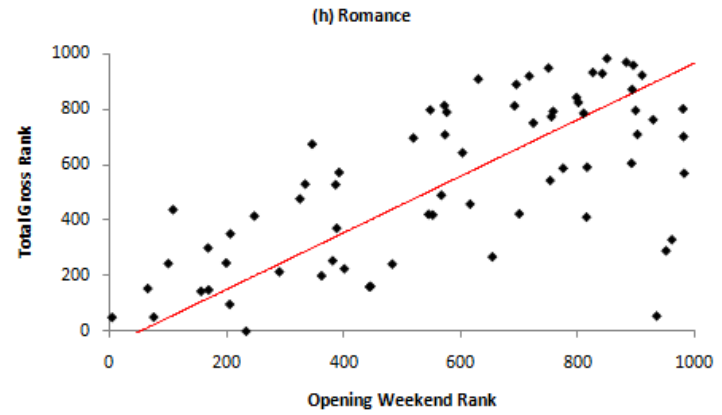
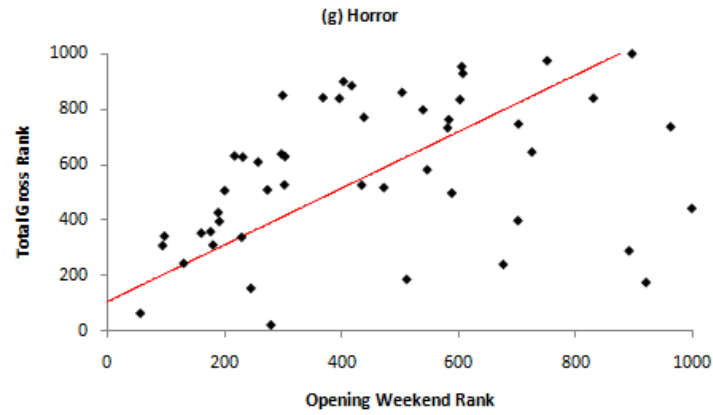
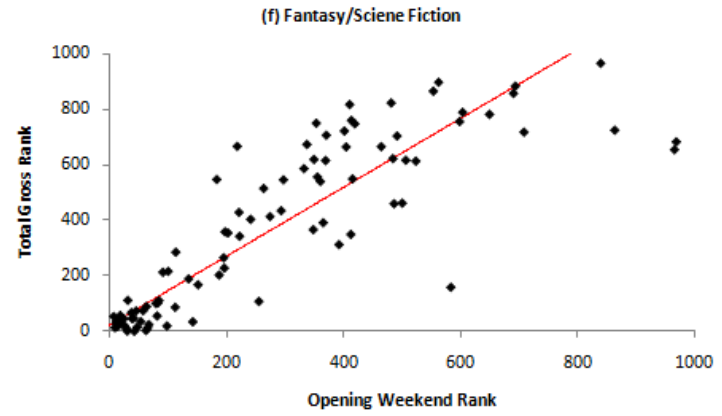
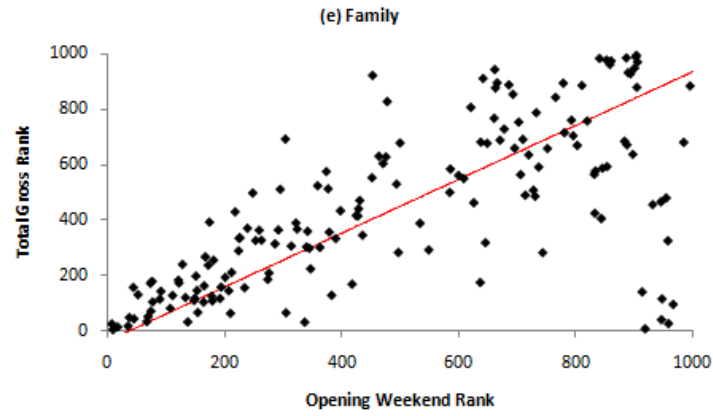


Figure 3 (continued) Opening gross and total gross ranks of films in each genre at the US box office, 1991 to 2010, with RMA trendline

