

## CASE 12

### The Movie Exhibition Industry: 2015

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While the *Guardians of The Galaxy* were unleashing an infinity stone containing orb to save the universe, the domestic movie exhibition industry was left undefended. Carnage ensued. The *Guardians* \$333 million domestic box office gross was a highlight of an otherwise abysmal 2014 for exhibitors. [Exhibit 1] Domestic box office receipts overall declined 5.2% to \$10.36 billion as admissions declined to their lowest level since 1995.<sup>1</sup> Much like a well-crafted suspense film, indicators of the fundamental health of the exhibitor market makes an observer question its ability to survive. Consider the following:

- Both revenues and admissions declined in 2014. Revenues peaked in 2013 at \$10.9 billion, but have declined in 5 of the prior 10 years; admissions have declined in 7 of the 10 prior years, down 19.5% from the most recent high in 2002. [Exhibit 2]
- At \$8.17, the average ticket price has risen 27% since 2005. Yet over the long-term, prices lag inflation, raising questions about the industry's value proposition. [Exhibit 3]
- The long term trend in per-capita admissions is negative. In 2014 the average number of films seen per capita was 3.9.<sup>2</sup> In 1946, the peak of movie going in America, the industry sold 4 billion tickets and the typical American went to the movies 28 times per year.
- Movies are more widely available than ever, creating new substitutes for where, when, and how they are viewed.
- Domestic demographic trends indicate exhibitors' core audience of 12-24 year olds offers limited opportunities for growth. The largest audience for growth consists of those 60 and older, an audience which now goes to the movies the least. [Exhibit 4]
- The industry is increasingly bifurcated along domestic (clear signs of maturity; increasing threat of substitution, difficulty innovating, and signs of consolidation) and international (growth; rapidly expanding theater counts, rising attendance and increasing revenues) lines.

Exhibitors are especially anxious for movie goers to return as they invested an estimated \$2.4 billion to convert theaters from film to digital projection since 2005. [Exhibit 5] The promises of the transition to digital projection were to excite audiences with an enhanced viewing experience – primarily 3D – and decrease distribution costs. Yet, the actual benefits of the transition remain elusive given the declining attendance. The potential to increase revenues with the much touted 3D appears fleeting as 3D admissions declining by a third from 21% of domestic revenues in 2010 to just 15% in 2014. [Exhibit 6]

Is there an infinity stone hidden somewhere in the movie exhibition business which can be unleashed? Will any guardians appear to save the movie exhibitor in 2015? Or might the movie theater itself be killed off and any potential sequel cancelled?

### The Motion Picture Value Chain

The motion picture industry value chain consists of three stages: studio production, distribution, and exhibition – the theaters that show the films. All stages are undergoing consolidation and technological changes, but the three-stages structure has changed little since the 1920s.

#### Studio Production

The studios produce the lifeblood of the industry: motion picture content. Studios are highly concentrated with the top 6 responsible for over 81% of box office receipts. [Exhibit 7] Even within the top studios concentration is increasing as the trend among studios is for fewer films with larger budgets and global appeal. In 2014, the top 6 studios produced 99 major pictures, down from 110 in 2000. Yet these films were responsible for an increasingly larger portion of global box office, up from 61% in 2000 to 81% in 2014. This concentration coupled with highly differentiated content gives the studios considerable negotiating and pricing power over exhibitors.

Studios are increasingly managed as profit centers within large corporations. Studios risks are significant as production costs are considerable. [Exhibit 1] Studios invested \$3.1 billion for what became 2014's highest grossing 25 film (\$123 million per film; range: \$12 million to \$250 million). Costs have increased faster than inflation.

Exhibit 1 Top 25 Motion Pictures Based on Box Office Receipts During 2014

Movie	2014		Studio	Genre	MPAA Rating	Prod. Budge. (mil.)	3D?	Domestic			International			Total			
	Gross	Rank						Gross (mil.)*	%	Rank	Gross (mil.)	%	Rank	Gross (mil.)	%	Rank	B:P Ratio
Guardians Of The Galaxy	\$333	1	Dis	Adv.	PG-13	\$170		\$333	43%	3	\$441	57%	11	\$774	4	4.6	28%
Hunger Games: Mockingjay I	\$313	2	LG	Thrll / Susp	PG-13	\$125		\$337	45%	2	\$415	55%	13	\$752	6	6.0	36%
Captain America: Winter Sold	\$260	3	Dis	Act.	PG-13	\$170	Yes	\$260	36%	4	\$455	64%	9	\$715	8	4.2	37%
The Lego Movie	\$258	4	WB	Adv.	PG	\$60	Yes	\$258	55%	5	\$211	45%	18	\$469	17	7.8	27%
Transformers: Age Extinction	\$245	5	Para	Sci-F Act	PG-13	\$210	Yes	\$245	22%	7	\$846	78%	2	\$1,091	2	5.2	41%
Maleficent	\$241	6	Dis	Fant	PG	\$180	Yes	\$241	32%	8	\$517	68%	4	\$758	5	4.2	29%
X-Men: Days Of Future Past	\$234	7	Fox	Act / Adv	PG-13	\$200	Yes	\$234	31%	9	\$514	69%	5	\$748	7	3.7	39%
Dawn Of The Planet Apes	\$209	8	Fox	Sci-F Act	PG-13	\$170	Yes	\$209	29%	11	\$500	71%	7	\$709	10	4.2	35%
Big Hero 6	\$205	9	Dis	Anim	PG	\$165	Yes	\$222	34%	10	\$430	66%	12	\$652	12	4.0	25%
The Amazing Spider-Man 2	\$203	10	Sony	Act / Adv	PG-13	\$200	Yes	\$203	29%	12	\$506	71%	6	\$709	9	3.5	45%
Godzilla	\$201	11	WB	Sci-F Act	PG-13	\$160	Yes	\$201	38%	13	\$328	62%	16	\$529	14	3.3	46%
22 Jump Street	\$192	12	Sony	Act Com	R	\$50		\$192	58%	14	\$140	42%	21	\$331	20	6.6	30%
Teenage Mutant Ninja Turtles	\$191	13	Para	Act/Adv	PG-13	\$125	Yes	\$191	39%	15	\$294	61%	17	\$485	16	3.9	34%
Hobbit: Battle Five Armies	\$190	14	WB	Adv	PG-13	\$250	Yes	\$255	27%	6	\$700	73%	3	\$955	3	3.8	21%
Interstellar	\$179	15	Para	Sci-F Adv	PG-13	\$165		\$188	28%	16	\$485	72%	8	\$673	11	4.1	25%
How To Train Your Dragon 2	\$177	16	Fox	Anim	PG	\$145	Yes	\$177	29%	17	\$442	71%	10	\$619	13	4.3	28%
Gone Girl	\$166	17	Fox	Thrll	R	\$61		\$168	46%	18	\$200	54%	19	\$368	19	6.0	22%
Divergent	\$151	18	LG	Act/Adv	PG-13	\$85		\$151	52%	19	\$138	48%	22	\$289	22	3.4	36%
Neighbors	\$150	19	Univ.	Com	R	\$18		\$150	56%	20	\$118	44%	23	\$268	23	14.9	33%
Frozen	\$138	20	Dis	Anim	PG	\$150	Yes	\$401	31%	1	\$873	69%	1	\$1,274	1	8.5	17%
Ride Along	\$135	21	Univ.	Com	PG-13	\$25		\$135	88%	21	\$19	12%	25	\$154	24	6.2	31%
Rio 2	\$132	22	Fox	Anim	G	\$103	Yes	\$132	26%	22	\$369	74%	14	\$500	15	4.9	30%
Lucy	\$127	23	Univ.	Sci-F Act	R	\$40		\$127	28%	23	\$332	72%	15	\$459	18	11.5	35%
The Fault In Our Stars	\$125	24	Fox	Drama	PG-13	\$12		\$125	41%	25	\$182	59%	20	\$307	21	25.6	38%
Lone Survivor	\$125	25	Univ.	Act Drama	R	\$40		\$125	84%	24	\$24	16%	24	\$149	25	3.7	30%
Total for Top 25	\$4,878					\$3,079		\$5,259			\$9,479			\$14,738		6.3	32%
Average for Top 25	\$195					\$123		\$210	41%		\$379	59%		\$590			

Notes: 2014 Gross includes only domestic revenues in 2014 (January 1 - December 31, 2014); film may have been released in 2013 and/or remained in theaters in 2015. Domestic, international, and total gross encompasses entire theatrical release.

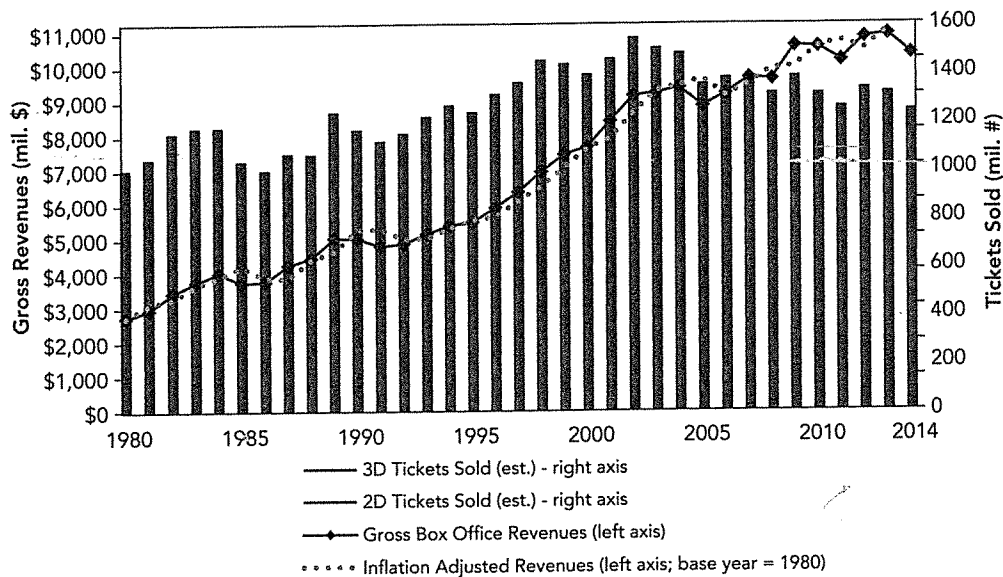
Studios: Dis = Disney, Fox = 20th Century Fox, LG = Lionsgate, Para = Paramount, Univ. = Universal, WB = Warner Bros.

Genres as follows: Act = Action; Adv. = Adventure, Anim = Animation; Com = Comedy; Drama = Drama; Fant = Fantasy; Hist = Historical; Musc = Musical; Rom = Romance; Sci-F = Sci-Fi; Thrll = Thriller; West = Western. Some production budgets estimated.

B:P Ratio = Total box office (Domestic + International) to Production Budget.

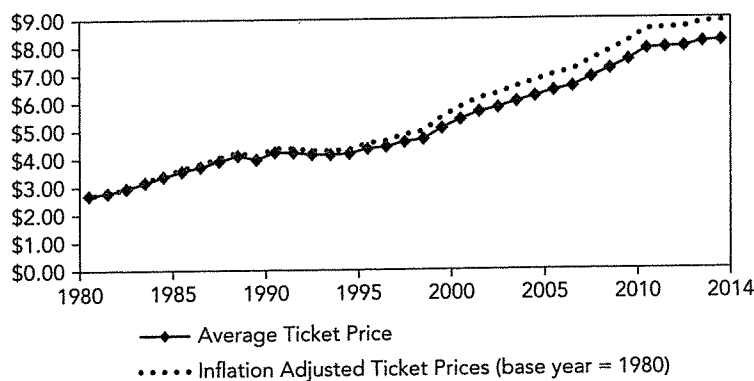
% O.W. = % of total domestic box office from the opening weekend.

**Exhibit 2** Domestic Box Office Receipts & Ticket Sales, 1980–2014



Data Source: Boxoffice Mojo.com and author estimates. 3D ticket volume estimated based on reported 3D revenues with ticket prices estimated as 30% premium over 2D. Portion of 2012 3D revenue and ticket volume is estimated.

**Exhibit 3** Ticket Prices 1980–2014



In 1980, the production budget for the highest grossing films averaged just \$11 million. In the 1990s, films turned to special effects and costs reached \$102 million (up 827%). Today, special effects alone can top \$100 million for a major production. These investments are considerable, yet no guarantee for success; a proven formula for success is elusive. Consider the seemingly similar start to two recent animated films.<sup>3</sup> The first, based on a children's toy, was developed at a cost of \$60 million and featured the talents of Will Farrell and Chris Pratt. The second

was based on an enduring cinema classic for \$70 million and featured the talents of Lea Michelle, Kelsey Grammer, and comedy legend Dan Aykroyd. Each went through years of development and investment decisions involving the effort and skill of hundreds of dedicated professionals. Yet, their box office fates differ dramatically. Everything about Warner Bros. *The LEGO Movie* was awesome. The film generated \$469 globally at the box office (a 7.8 box office revenue to production cost ratio) while Clarius Entertainment's *Legends of Oz: Dorothy's Return* grossed

**Exhibit 4 U.S. Demographic & Admission Trends**

Age Segment	2014 Admissions			2014 Population		Est. 2035 Population		Change 2014 - 2035		Projections		
	% of Tickets Purchased	Admissions Per Capita	% of Frequent Movie Goers <sup>1</sup>	# (mil.)	%	# (mil.)	%	# (mil.)	%	# Increase per existing screen <sup>2</sup>	New annual admissions per screen <sup>3</sup>	% of New Admissions
2 to 11 yrs	12%	3.3	7%	43.2	14%	50.0	13%	6.8	16%	170	563	10%
12 to 17 yrs	14%	6.4	15%	25.4	8%	30.6	8%	5.3	21%	132	843	15%
18 to 24 yrs	16%	6.2	19%	31.1	10%	35.7	9%	4.6	15%	114	708	13%
25 to 39 yrs	20%	3.7	19%	64.4	21%	73.3	19%	8.9	14%	223	827	15%
40 to 49 yrs	13%	3.6	15%	41.9	13%	48.7	13%	6.8	16%	170	611	11%
50 to 59 yrs	12%	3.1	11%	43.9	14%	43.8	12%	(0.1)	0%	-2	-7	0%
60 yrs+	13%	2.4	14%	63.7	20%	97.3	26%	33.6	53%	839	2,013	36%
	100%	Simple Avg. = 4.1 U.S. Avg. = 3.7	100%	313.6	100%	379.5	100%	65.8	19%	1,646	5,558	14%

Notes: Source: Data: US Census (2008), <https://www.census.gov/population/projections/data/national/2008/downloadablefiles.html> and author estimates.

<sup>1</sup> Frequent movie goer defined by MPAA as one who attends the cinema at least once per month.

<sup>2</sup> Based on 2014's 40,000 screens, actual # (not in mil.).

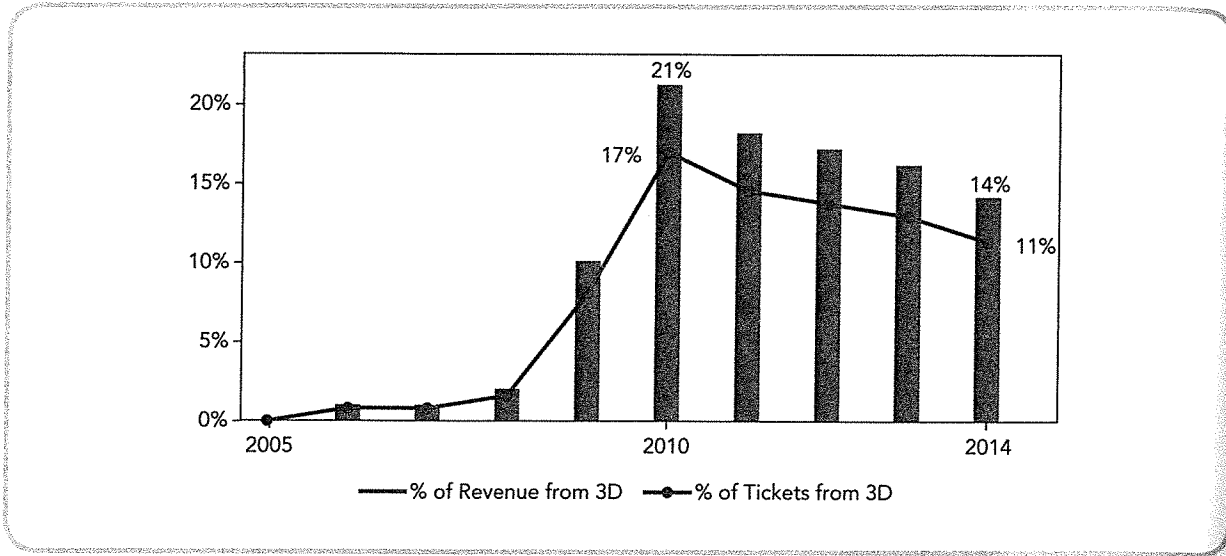
<sup>3</sup> Based on 2014 per capita admission rates by age group.

**Exhibit 5** U.S. Theaters Screens 2000-2014

Year	Analog Screens				Digital Screens - Non-3D				Digital Screens - 3D				
	Total Screens	Change from Prior Year	#	As % of Total Screens	Change from Prior Year	#	As % of Total Screen	Est. Digital Invest. (\$ mil.)	Change from Prior Year	#	As % of Total Screens	Est. 3D Invest. (\$ mil.)	Total Digital Investment (\$ mil.)
2000	37,396		37,396	100.0%									
2001	36,764	-1.7%	36,764	100.0%									
2002	35,280	-4.0%	35,280	100.0%									
2003	36,146	2.5%	36,146	100.0%									
2004	36,594	1.2%	36,594	100.0%									
2005	38,852	6.2%	38,862	100.0%	200	0.5%	\$10						\$10
2006	38,415	-1.1%	36,412	94.8%	2,003	901.5%	\$90						\$90
2007	38,974	1.5%	34,342	88.1%	3,646	82.0%	\$82	986	2.5%	21.3%	\$74	\$156	
2008	38,843	-0.3%	33,319	85.8%	4,088	12.1%	\$22	1,427	3.7%	25.9%	\$33	\$55	
2009	39,233	1.0%	31,815	81.1%	4,149	1.5%	\$3	3,269	8.3%	44.1%	\$138	\$141	
2010	39,547	0.8%	23,773	60.1%	7,937	91.3%	\$189	7,837	19.8%	49.7%	\$343	\$532	
2011	39,641	0.2%	14,020	35.4%	12,620	59.0%	\$234	13,001	32.8%	50.7%	\$387	\$621	
2012	42,803	8.0%	6,426	15.0%	21,643	71.5%	\$451	14,734	34.4%	40.5%	\$130	\$581	
2013	42,184	-1.4%	2,990	7.1%	24,042	111.1%	\$120	15,782	37.4%	39.6%	\$79	\$199	
2014	43,265	2.6%	1,747	4.0%	25,372	5.5%	\$67	16,146	37.3%	38.9%	\$27	\$94	
							\$1,168				\$1,211	\$2,379	

Notes: Based on author estimates and MPAA reports on # screens. Estimated investments (cumulative) based on estimated cost of digital screen (\$50,000 per installation) and digital 3D (\$75,000 per installation).

**Exhibit 6** Domestic Percentage of Revenue and Tickets from 3D



Notes: Data from MPAA 2014 Theatrical Statistics, boxofficemojo, and author estimates.

**Exhibit 7** Top 6 Studios/Distributors 2014

Studio / Distributor	2014				2000				% Change 2000-2014	
	Rank	\$ Share	Total Gross	# Films	Rank	\$ Share	Total Gross	# Films	Total Gross	# Films
20th Century Fox	1	17.3%	\$1,791	17	6	9.5%	\$723	13	148%	31%
Buena Vista	2	15.6%	\$1,618	13	1	15.5%	\$1,176	21	38%	-38%
Warner Bros.	3	15.1%	\$1,562	22	3	11.9%	\$905	22	73%	0%
Sony / Columbia	4	12.2%	\$1,262	19	7	9.0%	\$682	29	85%	-34%
Universal	5	10.8%	\$1,115	14	2	14.1%	\$1,069	13	4%	8%
Paramount	6	10.2%	\$1,053	14	4	10.4%	\$791	12	33%	17%
Total for top 6			\$8,400	99			\$5,346	110	77%	68%
Industry Total			\$10,360	701			\$7,661	478	41.4%	66.3%
Top 6 as % of Industry			81.1%	14.1%			61.4%	16.9%	24.3%	

Source: MPAA Theatrical statistics, boxofficemojo.com, and author estimates.

just \$18 million globally (box office to production cost ratio of just 0.3). The adage of the industry: Any motion picture can capture the lightning and become a hit; any one can become a flop.

Studios focus on 12-24 year olds, consistently the largest audience for movies. At just 18% of the U.S. population, this group purchases 30% of all tickets – the only segment of the population with a disproportionately high ticket purchases. More narrowly, 10% of the population are “frequent” movie goers who attend more than one movie per month and are responsible for half of all ticket sales. Thirty-four percent of these frequent movie

goers are 12-24 year olds.<sup>4</sup> Studios target this audience with PG and PG-13 fare including 19 of 2014’s top 25 releases. However, domestic demographic trends within this segment are not favorable. [Exhibit 4] While the U.S. population will increase 19% by 2035, this core audience will increase 18% (9.9 million) or 246 individuals per existing theater screen. The largest growth – in both percentage and number of individuals – is among 60+ year olds. This market currently has the lowest admissions per capita, just 2.4 annually, but represents a potentially lucrative market which will increase by 34 million, up 53%. If per capita viewership rates remain at current

levels within age segments, this audience of 60+ year olds represents half of all new movie goers.

Domestic exhibitors were once the sole distribution channel for films. This has changed dramatically. Films must increasingly cross cultural and language boundaries and appeal to a global market. Over 71% of U.S. studio revenues are now international. [Exhibit 8] Studios view this as their primary opportunity for growth as both ticket sales and dollar volume are rising rapidly. From 2000 to 2014, domestic receipts grew at an average annual growth rate of just 2% while international grew 11% annually. The studios are also changing their perspective on ticket prices in large population markets. In India, for example, attendees paid an average of just \$0.62 in 2013, but 2.7 billion tickets were sold – more than double U.S. admissions.<sup>5</sup>

This has led studios to internationalize their content. While dramas like *The Fault In Our Stars* and the humor of *Neighbors* require smaller production budgets than science fiction and action and adventure films, they are risky in international markets. Action-packed franchise films with known characters, little dialogue, made in 3D and laden with special effects present the least cross-cultural risk. Yet these films carry their own risk due to large budgets. Among the top 10 highest internationally grossing U.S. studio produced films in 2014, the average production budget was \$184 million – 50 percent higher than the average for the top 25 – and only one was below \$150 million.

As studios shift their focus to the international market they are less dependent on domestic exhibitors,

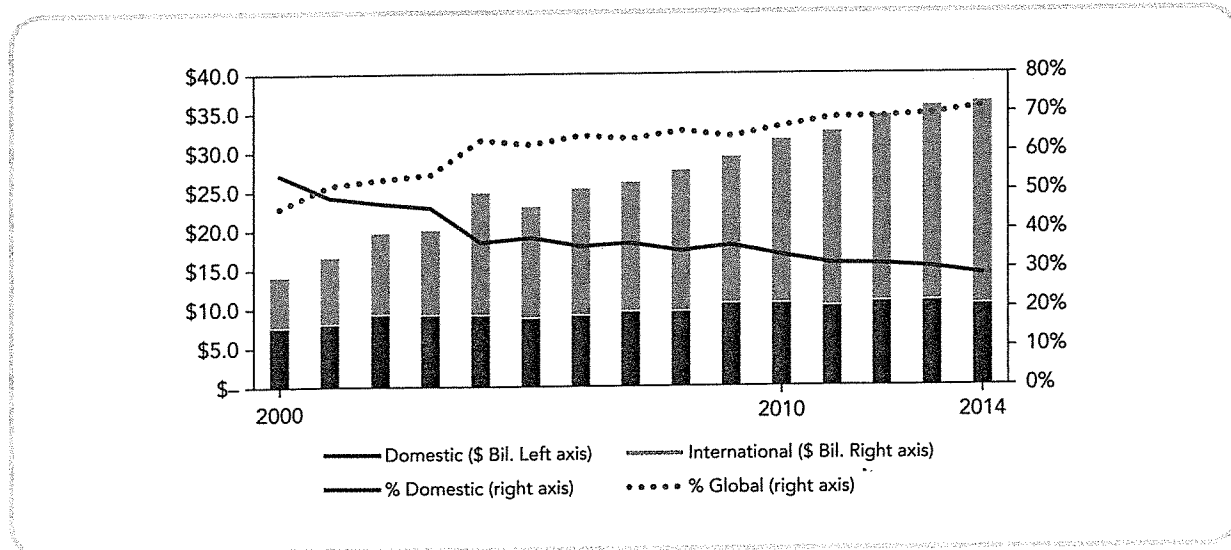
further increasing their bargaining power over exhibitors. This increases the threat of future disintermediation through alternative distribution channels. Studios increase revenues through product licensing, DVD and digital sales, and international expansion, while domestic exhibitors remain wholly reliant on charging viewers to see a movie.

### Distribution

Distributors are the intermediaries between the studios and exhibitors. Distribution entails all steps following a film's artistic completion including marketing, logistics, and administration. Distributors either negotiate a percentage of the gross from the studio for distribution services or purchase rights to films and profit directly from box office receipts. Distributors select and market films to exhibitors' booking agents, handle collections, audits of attendees, and other administrative tasks. There are over 300 distributors, but most is done by a few majors, commonly a division of a studios. Disney Marvel Studios, for example, produced *Guardians of the Galaxy* while distribution was handled by Disney's Buena Vista.

Until 2005, the distribution of all motion pictures in the US entailed the physical shipment of reels of 35mm film, a process largely unchanged since the 1940s. Each theater would receive a shipment of physical canisters containing a "release print" of a film. These prints cost \$20,000 – \$30,000 up-front plus \$1,000 – \$1,500 for each print. Print costs for a modern major picture opening on 3,500 screens costs \$3.50 – \$5.25 million. This was borne by the studios and exhibitors, but paid for by movie attendees.

**Exhibit 8** Domestic & International Box Office Receipts (\$ bil.)



Beginning in 2006, distributors and studios encouraged exhibitors to transition to digital projection technology. The technology works by using high powered LCD projectors to cast the movie onto a specialized screen. In lieu of film, the movies are delivered on reusable hard drives or via satellite or high speed internet. The threat of piracy is a major concern for the industry so all files are encrypted. The cost savings of digital distribution over film are considerable: The cost of each hard drive is \$150, just 10% of the cost of physical film. Additionally, digital projection allows for consistently high quality images as there is no physical wear to the film, and enables the exhibition of "alternative content" – images other than motion pictures that are obtained outside of the studio system.

By the end of 2014, more than 95% of U.S. screens had been converted to digital. [Exhibit 5] Each digital projection system serves a single screen and costs \$50,000 to \$75,000 including the projector, computers and hardware, and a specialized screen. This equates to a capital cumulative investment of approximately \$2.3 billion in the U.S. alone. To encourage the transition, distributors offered rebates in the form of virtual print fees (VPFs) for each film received digitally. These fees, as much as 17% of rental costs, expired in 2013.

### Exhibition

Exhibitors offer a location where audiences can view a motion picture. The basic business model of exhibitors – using movies as the draw and selling concessions to make a profit – has changed little since the time of touring motion picture shows that would set up in town halls and churches. As the popularity of motion pictures expanded, permanent local theaters were built. Studios soon recognized the potential profit in exhibition and vertically integrated, allowing control over audiences and captured these downstream profits. This practice ended in 1948 with the Supreme Court's ruling against the studios in *United States v. Paramount Pictures*. Theaters were divested by studios, leaving the two to negotiate film access and rental fees. Single theater and single screen firms' exhibitors fared poorly as studios retained the upper hand in setting rental rates. Exhibitors sought to increase bargaining power and economies of scale by consolidating, multiplying the bargaining power of individual theaters by the number of screens managed.

This reached its zenith in the 1980s with the mass rollout of the multiplex concept. Maximizing both bargaining power based off multiple screens while minimizing labor and facility costs, exhibitors constructed large entertainment complexes, sometimes with two dozen or

more screens. Most of the original local single screen theaters were doomed as they were unable to compete on cost or viewing experience and unable to gain access to the capital needed to construct multi-screen locations. Today, the typical movie screen in the U.S. is part of a 7-12 screens multiplex likely to be operated by one of four exhibitor "circuits" consisting of Regal, AMC, Cinemark, or Carmike. These four circuits operate 1,528 theaters in the U.S. (just 24% theaters), but control 45.5% of the screens. [Exhibit 9] This market concentration provides the largest exhibitors with greater negotiating power for access to films, prices for films, prices for concessions, and greater access to revenues from national advertisers than smaller circuits. However, the real power continues to remain with the studios due to differentiated content, the ability to play rival exhibitors against each other, and the increasing potential for disintermediation.

### The Business of Exhibition

Virtually all revenues for exhibitors come from three sources: box office receipts, concessions, and advertising. [Exhibit 10] Managers have low discretion; their ability to influence revenues and expenses is limited. Exhibitor operating margins average a slim 12%; net income may fluctuate wildly based on the tax benefits of prior losses. Overall, the business of exhibitors is best described as loss leadership on movies, break even on admissions, but make money selling concessions and showing ads to patrons who are drawn by the movie.

### Box Office Revenues

Ticket sales constitute two thirds of exhibition business revenues. The return, however, is quite small due to the power of the studios. Among the largest exhibitors, film rental fees average 54% of box office receipts. These costs are typically higher for smaller circuits. Rental fees are based on the size of the circuit as well as the time and seat commitment made to a film. The portion of box office revenues retained by the theater increases each week. On opening weekend an exhibitor may pay the distributor 80-90% of the box office gross in rental fees, retaining only 10-20%. In subsequent weeks the exhibitor's portion increases to as much as 80-90%. While the typical attendee may gripe about the average ticket price of \$8.17, most do not realize that \$4.33 immediately goes to the studio and that the exhibitor at best breaks even on the admission unless concessions are purchased.

The risk and complexity of booking is increasing. An average of 32 percent of a picture's domestic revenues comes from the opening weekend. A weak opening

**Exhibit 9** Leading US Circuits 2014

Company	Theater Brands	U.S. & Canada				Non-U.S. & Canada				Global	
		# Theater Locations	% of U.S. Theaters	# Screens	% of U.S. Screens	Avg. Screens per Theater	# Theater Locations	# Screens	% of Non-U.S. Screens	# Screens	% Global Screens
Regal	Regal, United Artists, Edwards	574	9.1%	7,367	17.0%	12.8	0	0	0.0%	7,367	5.2%
AMC*	AMC, Loews, Wanda	345	5.5%	4,931	11.4%	14.3	153	1,344	1.4%	6,275	4.4%
Cinemark**	Cinemark, Century	335	5.3%	4,499	10.4%	13.4	160	1,177	1.2%	5,676	4.0%
Carmike	Carmike	274	4.3%	2,897	6.7%	10.6	0	0	0.0%	2,897	2.0%
	Total for leading four	1,528	24.3%	19,694	45.5%	12.9	313	2,521	2.6%	22,215	15.6%
	Other firms	4,772	75.7%	23,571	54.5%	4.9		96,214	97.4%	119,785	84.4%
	Industry total	6,300	100.0%	43,265	100.0%	6.9		98,735	100.0%	142,000	100.0%

Notes: Data from SEC filings, MPAA, NATO, UNESCO, and author estimates; based on screens at the start of 2015.

\* International locations for AMC includes those owned and operated by parent company Wanda Group (includes 150 locations with 1,315 screens in China). AMC in recent years divested operations in Canada, UK, Japan, Hong Kong, Spain, Portugal, France, Argentina, Brazil, Chile, and Uruguay while parent company Wanda expanded rapidly in China.

\*\* Cinemark's international operations includes locations in Brazil (65 theaters: 516 screens), Colombia (28; 144), Argentina (19; 168), Chile (16; 113), Central America (Honduras, El Salvador, Nicaragua, Costa Rica, Panama and Guatemala, 15; 110), Peru (10; 77), Ecuador (6; 36), and Bolivia (1; 13).

**Exhibit 10** Typical Revenue & Expenses Per Screen at an 8-Screen Theater

REVENUES		
Box Office (\$257,923/\$8.59 = 30,037 admissions = 618/week/screen)	\$257,923	63%
Concessions (\$130,964/30,037 admissions = \$4.36/admission)	\$130,964	32%
Advertising (\$21,117/30,037 admissions = \$0.70/admission)	\$21,117	5%
<b>Total Revenues (\$12.29/admission)</b>	<b>\$442,400</b>	<b>100%</b>
EXPENSES		
Fixed		
Facility	\$65,942	15%
Labor	\$39,565	9%
Utilities	\$48,358	11%
Other SG&A	\$79,131	18%
<b>Total Fixed Costs</b>	<b>\$232,997</b>	<b>53%</b>
Variable		
Film Rental (Percentage of Box Office Admission Revenue)	\$139,278	54%
Concession Supplies (Percentage of Concession Revenue)	\$17,898	14%
<b>Total Variable Costs</b>	<b>\$157,177</b>	<b>36%</b>
<b>Total Expenses</b>	<b>\$390,174</b>	<b>88%</b>
<b>OPERATING INCOME</b>	<b>\$52,226</b>	<b>12%</b>

Notes: author estimates based on analysis of select large exhibitor SEC filings, MPAA and NATO data; scaled to a single screen within an 8-theater multiplex; values may deviate from industry average and the specifics for the industry and any individual firm.

weekend results in a short run in theaters. In industry terminology the “multiple” (the percentage coming after opening weekend) has been declining steadily, falling 25% since 2002<sup>6</sup> putting exhibitors at increasing risk. Among the top 25 films, the length of theatrical run declined nearly 10 percent from 2004 to 2014. Beyond what movie to show and how many screens to devote to each film, exhibitors must now also make decisions as to how many screens to allocate to 2D and 3D versions. All these factors increasingly make the opening weekend “make or break” and complicate the exhibitor’s operations.

### Concessions

A frequent movie goer lament is high concession prices. At an average of \$4.36 per admission, concessions constitute 30% of exhibitor revenues. Direct costs of under 15% make concessions the primary source of exhibitor profit. These profits are influenced by three factors: attendance, pricing, and material costs. The most important is

attendance: more attendees yields more concession sales. Per patron sales are influenced by prices. The \$4.50 and \$8.00 price points for the large soda and popcorn are not accidental, but the result of considerable market research and profit maximization calculations. Costs are influenced by purchase volume with larger chains able to negotiate better prices on everything from popcorn and soda pop to cups and napkins.

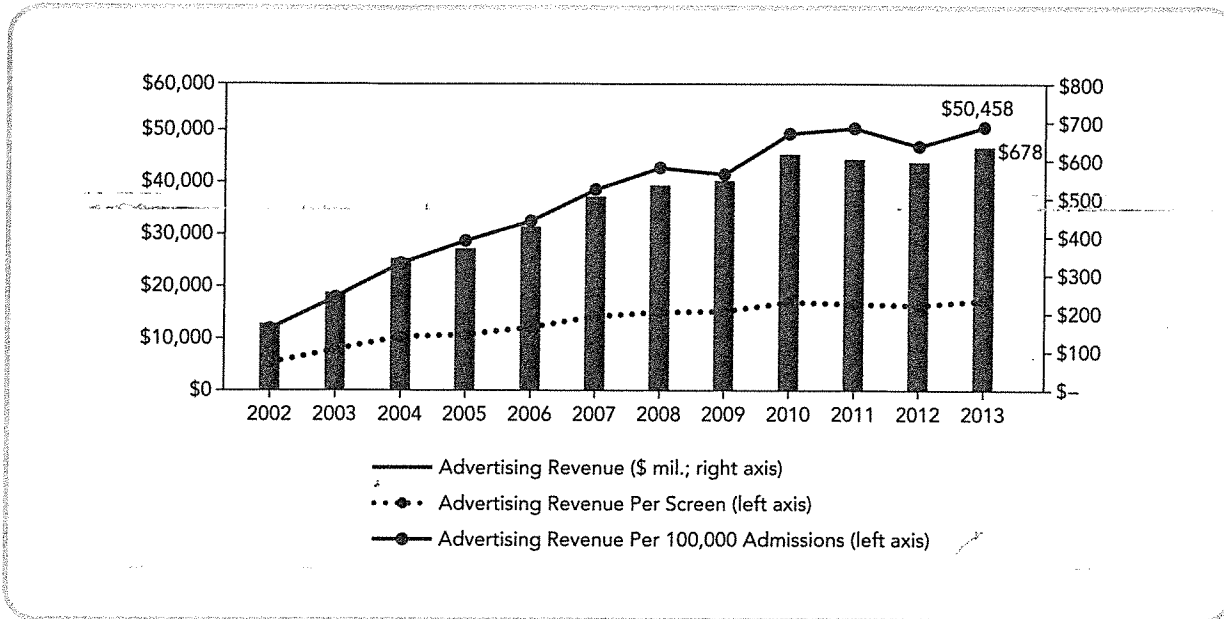
Audience concession expectations are increasing and theaters are responding. Once consisting of only boxed candy, popcorn, and soft drinks purchased at the counter in the lobby, concessions now include a variety of food, drink, and location options. While concession options such as hamburgers, salads, hot appetizers, and alcoholic beverage sales increase average concession sales per patron, they must be considered in conjunction with higher costs for kitchen facilities, labor, and food costs. A \$10 burger has a far lower gross margin than a \$8 tub of popcorn due to higher food costs. A variety of location options, such as counter, in-lobby, and in-theater waiter service may also drive revenues, but come with additional costs.

### Advertising

The low margins derived from ticket sales cause exhibitors to focus on other sources of revenue. The highest margin, therefore the most attractive, is advertising, including pre-show and lobby advertising and previews. Since 2002, advertising revenues, and the time devoted to them at the start of every feature, increased from \$186 to \$678 million in 2014.<sup>7</sup> The number of previews increased from 3 or 4 ten years ago to 6 or 7 currently including the two typically provided to the studio as part of the film rental agreement.<sup>8</sup> [Exhibit 11] Though advertising constitutes just 5% of exhibitor revenues, it is highly profitable and growing. Instead of paying for and showing short films prior to the feature, exhibitors show ads which they are paid to show. Advertising revenues for exhibitors averaged \$17,221 per screen in 2014, up 100% in the last decade.<sup>9</sup> Yet audiences express dislike for advertising at the theater and, if dissatisfaction increases, may opt to view movies at home. Balancing the lucrative revenues from ads with audience tolerance is an ongoing struggle for exhibitors.

### The Major Exhibitor Circuits

Four circuits dominate the domestic exhibition market, serving different geographic markets in different ways.<sup>10</sup> [Exhibit 9] Regal, which operates its namesake Regal Theaters as well as United Artists and Edwards

**Exhibit 11** Exhibitor 2015 Advertising Revenue

Source: Cinema Advertising Council, 2014

theaters, is the largest with 7,367 screens in 574 domestic theaters. Regal focuses on mid-size markets using multiplex and megaplexes that average nearly 13 screens per location, with an average ticket price of \$9.08. AMC, operating under AMC and Loews chains, is the second largest domestic exhibitor with 4,931 screens in 345 theaters. Averaging 14 screens per location, AMC leads the industry in the operation of large multiplexes. They do so by concentrating on urban areas near large population centers such as those in California, Florida, and Texas. By focusing on 3D, IMAX, and other premium viewing experiences, AMC has an average ticket price of \$9.43. Cinemark is the 3<sup>rd</sup> largest player with 4,499 screens in 335 domestic locations under Cinemark and Century brands. Cinemark serves smaller markets, operating as the sole theater in over 92 percent of its markets. Their average ticket price is \$7.02. Carmike concentrates on small to midsized markets, targeting populations of less than 100,000 that have few alternative entertainment options. They do so with fewer screens at each location, averaging 106 per location (274 theaters; 2,897 screens). Carmike's ticket price averaged \$7.23. [Exhibit 12]

While ticket prices vary, differences in net profit margins are due mostly to differences in utilization and the costs of facilities, labor, and utilities. Despite considerable size differences, the actual cost of content for these circuits varies little among the majors circuits.

Regal's exhibition costs as a percentage of revenue is lowest at 52% of admission revenues, followed by AMC (53%), Carmike (55%) and Cinemark (56%). While the rentals costs for these circuits is similar, it is lower than for smaller circuits.

The circuits ability to efficiently utilize their facilities varies considerably. Cinemark's average of 38,661 attendees per screen is nearly double Carmike's 21,414 per screen. Revenues per screen for both Cinemark (\$271,409) and Regal (\$272,924) are nearly double that of Carmike (\$154,900). The differences in utilization combined with differences in prices, concession sales per person, and facilities, wages and other expenses results in Cinemark having the highest operating income per admission (\$2.87), followed by Regal (\$1.39), and Carmike (\$0.72).

Despite the trend toward internationalization by studios, exhibitors until recently have been exclusively domestic firms. Cinemark has the broadest international presence with 153 theaters (1,344 screens) in Mexico and seven Central and South American countries. In 2012, AMC was acquired by the Chinese conglomerate Dalian Wanda Group Corp for a reported \$2.6 billion.<sup>11</sup> Wanda, with interests in property, entertainment, and tourism owns and operates 1,177 screens in 153 theaters in China. Wanda/AMC is the largest global exhibition company based on screen count with 6,575 screens and is expanding rapidly in China.

**Exhibit 12** Select 2014 Carmike, Cinemark & Regal Financials

	Carmike	Cinemark <sup>†</sup>	Regal
<b>Theater and Attendance Information</b>			
Screens (U.S. only)	2,758	4,499	7,324
Theaters (U.S. only)	262	335	569
Screens per Theater (U.S. only)	10.5	13.4	12.9
Total US Attendance (in thousands)	59,056	173,900	220,000
Avg Ticket Price	\$7.23	\$7.02	\$9.08
Avg Concessions	\$4.45	\$3.65	\$3.77
Avg Attendance per Screen	21,414	38,661	30,038
Avg Admission Revenue per Screen	\$154,900	\$271,409	\$272,924
<b>Income Statement (\$ mil.)</b>			
Revenues			
Admissions	\$427.21	\$1,220.80	\$1,998.90
Concessions*	\$228.21	\$635.60	\$829.60
Other Income <sup>†</sup>	\$34.50	\$66.00	\$161.60
<b>Total Revenues</b>	<b>\$689.93</b>	<b>\$1,922.40</b>	<b>\$2,990.10</b>
Admissions as % of Revenues	62%	63%	67%
Concessions as % of Revenues	33%	32%	28%
Other as % of Revenues	5%	5%	5%
Expenses			
Exhibition	\$235.46	\$681.10	\$1,047.10
Concessions	\$30.31	\$86.40	\$111.10
Building, Wages, Utilities & Other Operating Costs	\$381.39	\$828.00	\$1,525.50
<b>Total Cost of Operation</b>	<b>\$647.16</b>	<b>\$1,422.70</b>	<b>\$2,683.70</b>
<b>Operating Income</b>	<b>\$42.77</b>	<b>\$499.70</b>	<b>\$306.40</b>
Operating Income per admission	\$ .72	\$2.87	1.39
Operating Income as % total revenue	6%	26%	10%
Exhibition Costs as % of Admission Revenues	55%	56%	52%
Concessions Costs as % of Concession Revenues	12%	16%	13%
Buildings, wages, utilities & other costs as % of Total Revenues	55%	46%	57%
Buildings, wages, utilities & other costs per attendee	\$6.46	\$6.99	\$6.93
<b>Net Income***</b>	<b>\$(8.9)</b>	<b>\$193.99</b>	<b>\$105.20</b>
Net Profit Margin	-891%	7%	3%
<b>Balance Sheet (dollars in millions)</b>			
Total Assets	\$898.10	\$4,151.98	\$2,539.50
Total Debt	\$609.56	\$3,028.85	\$3,436.80
Debt : Assets Ratio	0.68	0.73	1.35

Notes: Data source: SEC filings & author estimates.

<sup>†</sup> Cinemark per ticket values based on domestic operations; others are based on consolidated domestic and international operations.

\* Carmike reports aggregated concession and advertising revenues. Amounts are estimated.

<sup>††</sup> Theater, screen and revenue, expense data for Carmike's US operations. Net income, assets and debt figures are consolidated (dom. and intl.).

<sup>\*\*\*</sup> Net income may include carryover of substantial tax benefits from losses and interest expense.

Overall, while the major circuits focus on different geographic locations, there is little differentiation in the offerings of exhibitors within individual markets. Prices differ little, the same movies are shown at the same times, and the food and services choices are nearly identical. Competition between theaters within markets often comes down to distance from home, convenience of parking, and proximity to restaurants.

## Challenges for Exhibitors

Exhibitors are faced with an increasing number of challenges in their operating environment.

### Benefitting From Digital Investments

Exhibitors have made considerable investments in digital projection technology. By the close of 2014, all but 1,747 of the 43,265 screens in the U.S. had been converted from film to digital projection (96% conversion). Those remaining film-based are typically small, one screen local theaters, often operated as not-for-profit organizations. The total investment by exhibitors is approximately \$2.4 billion. The benefits of this conversion for exhibitors should manifest themselves in (1) lower exhibitor costs and increased revenues, and (2) opportunities for increased revenues from 3D.

On the cost side, digital distribution dramatically reduces distribution costs when compared to physical film. Digital distribution is expected to save \$1 billion annually on print costs and distribution. Yet there is little evidence to date that these savings will accrue to the exhibitors. Film rental fees, which include distribution costs, have held steady despite the transition to digital. Rental fees averaged 54% among Cinemark, Regal, and Carmike in 2014, little changed compared to costs prior to the digital transition.

On the revenue side, exhibitors sought significant additional per ticket movie revenues from surcharges for enhanced viewing experiences, primarily 3D. 3D content requires the cooperation of studios and exhibitors. For studios, 3D adds 15-20% to the cost of production. *Avatar's* planned release in 2009 was used to spur 3D installations, which rose from less than 4% of screen to 8% – an addition of 1,800+ 3D screens in just one year. The film was a box office smash, grossing \$750 million domestically with 82% of revenues from 3D viewings.

For exhibitors, 3D requires conversion to digital projection and the added costs for 3D capable equipment. As part of the conversion to digital, exhibitors installed 3D capabilities selectively. 37% of the screens in the U.S. are now 3D capable. Yet, interest in 3D has

waned, accounting for only 14% of box office revenue in 2014, down from 21% in 2010. [Exhibit 6] Some industry observers caution that the future opportunity to capitalize on 3D-driven revenues may be limited. According to industry insider Bob Greenfield, specific movies do well in 3D while others fail as people are getting choosier about which movies they see in 3D versus 2D. Overall, the extent to which the conversion to digital has and will continue to benefit exhibitors through cost reductions and 3D revenue is questionable.

### Countering the Declining Allure of the Theater

Traditionally, the draw of the theater may have been far more important than what film was showing. Moviegoers describe attending the theater as an experience, with the appeal based on:<sup>12</sup>

- the giant theater screen
- the experience of watching the movies with a theatrical sound system
- the opportunity to be out of the house
- not having to wait to see a particular movie on home video
- the theater as a location option for a date

The ability of theaters to provide these beyond what audiences can achieve at home is diminishing. Of the reasons why people go to the movies, only the place aspects, the theater as a place to be out of house and as a place for a date, seem immune from substitution within exhibitors current core audience. Few teenagers want movie and popcorn with their date at home with mom and dad.

The overall “experience” offered by theaters falls short for many. Marketing research firm Mintel reports the reasons for not attending the theater more frequently. Specific factors include: the overall cost, at home viewing options, interruptions such as cell phones in the theater, rude patrons, the overall hassle, and ads prior to the show.<sup>13</sup> The movie-going experience is frequently described as one of interruptions caused by cell phones, loud patrons, and noise from adjacent theaters.<sup>14</sup> Add to this an increasing number of pre-movie advertisements and previews and the experience has all the charm of an IRS audit, a delayed flight, and the used-car buying experience.

The time allocated to pre-show ads can be eye opening, even for industry insiders. Toby Emmerich, New Line Cinema's head of production faced a not-so-common choice: attending opening night in a theater or in a private screening room at actor Jim Carrey's home. Seeking

the part-of-the-crowd experience, he opted for the latter. After enduring fifteen minutes of ads, he confided to his wife that perhaps it was not the best choice.<sup>15</sup>

**The Home Viewing Substitution.** Rapid improvements and cost reductions in home viewing technology and the widespread availability of timely and inexpensive content are making home viewing a viable substitute to theater exhibition. The unique value proposition offered by movie theaters' large screens, the audio quality of a theatrical sound system, and avoiding the long wait for DVD release are fading.

### **The Home Viewing Substitution – Technology.**

The average home television set is increasingly a large, high definition set coupled with inexpensive yet impressive audio system. Compared to home equipment options of the past, in-home technology increasingly represents a viable visual substitute to the big screen at the theater. Prior to 2009, television transmissions were formatted as 480 interlaced vertical lines (480i) of resolution, the standard since the 1950s. The Federal Communication Commission mandated that all broadcasters convert to digital broadcasting in 2009. Broadcasters often opted to upgrade from 480 to high definition (HD) equipment offering 1080 vertical lines of resolution (1080i).<sup>16</sup> This led to consumers upgrading to HD televisions. In 2014, 77% of U.S. households had at least one HD television allowing for very high quality visual images.<sup>17</sup>

While TV picture quality has increased, sets have also gotten larger and cheaper. Wholesale prices for televisions fell 65 percent from the late 1990s to 2007<sup>18</sup> as manufacturing economies from production of LCD screens emerged. TV sets now average \$450 retail.<sup>19</sup> This price decrease has occurred at the same time the average TV has increased dramatically in size. In 1997, the average TV set was 23". This increased to 32" in 2010 and to 39" in 2014.<sup>20</sup> As consumers upgrade their sets, they move the 32" set into the bedroom and upgrade to a 40-50" or larger set for the primary TV.<sup>21</sup> Sharp, a leading TV manufacturer predicts the *average* screen will reach 60" in the very near future.<sup>22</sup>

These sets are supported by low cost HD DVD players, and audio and speaker components packaged as low cost home theaters. The average Blu-ray DVD player now costs under \$100, often with 3D capability. Bundled home theater systems that include TV, surround sound audio, and a Blu-ray player offer a movie experience that rivals many theaters, all for under \$1,500. Mike Gabriel, Sharp's head of marketing and communications, argues that the cinema experience is now possible with

their television. Home screening rooms, once requiring expensive film projection and sound equipment, are now no longer the exclusive domain of the rich and famous.<sup>23</sup> Overall, home TVs are becoming larger and offer high quality images that reduce the differentiated appeal of the "giant" screen offered by exhibitors.

If today's home theaters are a problem for exhibitors, the next generation may be catastrophic. Adoption of the next wave of televisions – "Ultra" HD (UHD) or 4K – has begun. A 4K set has four times the resolution of today's 1080 set. The image quality difference can be striking: On a 480 set a viewer may notice that a football game is being played in the rain. On a 1080 set the same viewer will notice that the field, ball, players and spectators are wet. On a 4K set, individual droplets of water can be seen dripping off players' helmets. No date is set for 4K to become the industry standard, but consumer electronics companies are keen to spur UHD sales as TV sales, overall, have flattened. Sales of 4K sets are the highest growing segment of the TV market, albeit currently aimed at early adopters. Despite an average sales price of \$2,400, sales of UHD TVs in the U.S. reached \$668 million in 2014, nearly 7 percent of all TV sales revenue.<sup>24</sup> The number of units sold is expected to double in each of the next two years as adoption becomes widespread.<sup>25</sup> Among UHD TVs, 55" sets are the most common (38% of units sold) followed by 65" sets (34% of units sold). Larger sets, 70" and larger, constitute 4% of sales. These sets pose a very direct challenge for theaters differentiation based on screen size and quality as the most common projection standard in theaters – the one exhibitors just invested \$2.3 billion in during the conversion to digital – is 4K. The history of technology updates to compete on visual quality is as old as the exhibition business itself. To maintain an advantage in the visual experience provided at the theater, exhibitors must consider moving to the next generation of commercial projection, 8K and 16K, or lose one of a small set of advantages.

### **The Home Viewing Substitution – Content Availability & Timing.**

The best hardware offers little value without content. Unfortunately for exhibitors, home content is flourishing and goes well beyond movies. Studios have long relied on a "windowing" model for revenue generation: the sooner a motion picture is viewed following the theatrical release the costlier it is to see it. Currently, studio profits are maximized with the inclusion of a theatrical release which generate an average \$4 per admission. This is most often followed by DVD and digital sales which net the studio \$12 to \$15 per copy and is increasingly made by a consumer who opted

to not see the movie in a theater.<sup>26</sup> Studios once relied on these sales to fuel profits but physical DVD sales have declined since peaking in 2006 at \$13.7 billion.<sup>27</sup> While digital purchases grew 47% in 20013 to \$1.2 billion,<sup>28</sup> studios have seen net declines in total sales from 2011's revenues which totaled \$9.5 billion.<sup>29</sup> To spur sales and capitalize on marketing expenditures from the theatrical release, studios have reducing the time between theatrical release and DVD availability. Much to the castigation of exhibitors concerned that the decline cannibalizes theater admissions, this release window has declined from 23.7 weeks in 2000 to 16.6 weeks in 2012.

DVD and digital sales are followed by video on demand (VOD) which generates \$3.50 for the studio per purchase,<sup>30</sup> but may include multiple viewers. Later release to the physical rental and streaming market nets studios less revenue. Studios net about \$1.25 per DVD sold to a rental company.<sup>31</sup> Once dominated by physical stores, movie rentals expanded into physical DVD channels with subscription (e.g., Netflix, Blockbuster, and Amazon Prime) and one-up (e.g., Redbox and Blockbuster) options as well as subscription streaming (e.g., Netflix, Hulu, HBOGo). These offer very attractive prices for consumers, but have been identified by studios as a contributing factor for declining movie sales. RedBox's kiosk-based rentals are attractive to occasional viewers, costing as little as \$1.25 per night.

Streaming is the fastest growing portion of the rental market and among the most cost effective for viewers and providers. Estimates put Netflix's average streaming cost at \$0.51 per viewing. Streaming sufficiently cannibalized DVD sales to the point that studios imposed a 28-day delay from DVD sales to the availability of streaming. Exhibitors expressed strong encouragement when several studios expressed a desire for a 56-day delay to increase DVD sales. Both Netflix and Amazon offer SD as well as HD formats and are beginning to offer content in the 4K format.

Streaming services are becoming a direct competitor to both studios and exhibitors as they move into content development. Nextflix, for example, is producing both television series and original movies. In conjunction with movie producer Weinstein Co. and projection and screen technology company IMAX, Netflix has produced a sequel to *Crouching Tiger, Hidden Dragon* for distribution simultaneously on Netflix and on IMAX screens in August, 2015<sup>32</sup>. The announcement resulted in stock price declines for exhibitors including AMC, Regal, and Cinemark.<sup>33</sup> According to Miriam Gottfried of the *Wall Street Journal*, investors may be fearing that the traditional studio "windowing" system – which makes

theaters the only venue for movies upon initial release – may be approaching the end of its life.<sup>34</sup>

It is important to recognize that studios have options beyond the windowed theatrical release model. This includes releasing a film directly to audiences at the same time a film is in the theater, so called "simultaneous release" or to eliminate the theatrical release entirely. Increases in internet technology make disintermediation – the studios redefining their distribution to exclude exhibitors – increasingly possible. Exhibitors threatened a boycott due to Universal's plan for a premium VOD release of *Tower Heist* just three weeks after its theatrical opening. The plan was scrapped due to the threats. While exhibitors won the battle, premium VODs revenue potential – as much as \$59.99 per purchase – remains attractive to the studios.

Perhaps the ultimate test of simultaneous release was initiated by North Korea at the end of 2014 when a computer hack of Sony Pictures and fears of violence resulted in exhibitors curtailing the wide theatrical release of the Seth Rogan comedy *The Interview*. The film was instead offered in a limited theatrical release and on demand, generating \$30 million. Sony announced that it was their highest grossing online film release.<sup>35</sup> The revenues were, however, well shy of the \$60-\$70 million forecasted for a wide theatrical release. Arguing against simultaneous release and premium VOD, the North American Theaters Association (NATO), an exhibitor trade group, estimates Sony forfeited \$12.5 million in additional box office revenues had the release proceeded.

Overall, the availability of content and the visual and audio experience available in the home is rapidly converging with the offerings available at a movie theater. The separation of movies, television, and other content is creating increased competition for viewers, according to Paul Dergarabedian, president of Hollywood.com's box-office division.<sup>36</sup> While viewing movies on a tablet or other device is common, viewing is returning to the living room television. In 2014 the number of internet enabled televisions rose 70% to 22 million and now exceeds the number of internet connected Blu-ray players.<sup>37</sup> The content being watched goes beyond movies. The leading applications for streaming from a TV are Netflix, YouTube, Amazon Prime & Instant Video, Hulu Plus, and HBOGo.<sup>38</sup> One blogger on the movie fan site Big Picture reports having previously viewed movies in the theater exclusively, then less, and now almost never. The reason? A giant home screen equipped with surround sound, a clean floor and seats, with movies that start on time without ads and no chatty viewers. Best of all: no cell phone interruptions.<sup>39</sup>

## Recent Exhibitor Initiatives

Exhibitors are well aware of the increasing number of ways in which to view motion pictures. They have a long tradition of adopting innovations that increase attendance or reduce costs. Exhibitors were among the first commercial adopters of air conditioning, which perhaps drew in as many customers as a refuge from summer heat as for entertainment. Advanced projection systems, screens, and sound systems have been continuously adopted to improve the viewing experience. Other innovations increase experience quality while also lowering costs. Stadium style seating, now ubiquitous, was originally viewed as an experience differentiator, but equally beneficial is a reduction in the square footage needed per seat. This reduces the size and cost of facilities. Exhibitors continue to pursue a number of strategic initiatives aimed at increasing attendance, increasing the viewer's willingness to pay, and lowering costs.

## Projection Innovations

The conversion to digital projection and roll-out of 3D are not the only projection innovations being pursued. Some directors are opting to increase image quality by doubling the number of frames per second (fps) of film from the long established standard of 24 to 48. Peter Jackson's 2012 *The Hobbit* was shown in the 48 fps format to a limited number of screens with the required projection technology. The increased frame rate results in an especially crisp image with no blurring that, while jarring to some, is said to create a sense of being part of live action, but requires specialized equipment.

Most large circuits offer some form of extra-large scale screens.<sup>40</sup> Traditionally located only in specially constructed dome-shaped theaters in science museums, the original IMAX format utilized film that was 10 times the size of that used in standard 35mm projectors. IMAX now operates more than 600 screens. These circuit-based IMAX digital screens are far smaller than the original IMAX screens, but can be much larger than the typical theater screen. Located within a Regal or AMC theater complexes, the screens are often booked and operated by IMAX. Action films, usually in 3D, are a staple. To capture more of this differentiated revenue, several circuits have begun creating their own super-size screens and formats. IMAX is typically offered at a premium of \$3 to \$7 per ticket.

Sound systems are also being upgraded. In the 1980s, theaters impressed viewers with 7.1 sound systems – two rear channels (left and right), two channels mid screen, two near the screen, one under the screen, and a subwoofer

channel for bass. Such systems have long been available for homes. To keep theater sound as a differentiator, Dolby Laboratories has created Atmos™<sup>41</sup>, a full surround system with up to 64 individual channels for speakers in a theater, including multiple ceiling speakers that can truly immerse the audience in sound. Given the number of speakers involved, this may be a technology that is viable in very few homes.

## Alternative Content

Exhibitors' transition to digital projection was an enabling technology for alternative content, a broad term encompassing virtually any content that is not a motion picture. This includes live concerts and theater, standup comedy, sporting events, television series premiers and finales, even virtual art gallery tours. Alternative content revenues totaled \$112 million in 2010<sup>42</sup> and are growing rapidly, and by some estimates will reach \$1 billion annually – 10% of current box office – by 2020.

The current economic logic of alternative content is as a filler of seats during off-peak movie attendance, particularly Monday thru Thursday when only 5% of theater seats are occupied.<sup>43</sup> Bud Mayo, CEO of Digiplex Digital Cinema Destinations, describes the approach: "What happens with those [alternative content] performances is that a single event will out gross certainly the lowest-grossing movie playing that theater that day. The relationship has averaged more than 10 times the lowest-grossing movie for the entire day."<sup>44</sup> In marginal dollar terms, alternative content can be a boon on otherwise slow nights. A recent Wednesday showing of Broadway's *West Side Story* at a Digitech theater had an average ticket price of \$12.50 and grossed \$2,425. In comparison, screens showing films that night grossed just \$56 to \$73 each. The alternative content also brought in nearly 200 additional potential customers for concessions.<sup>45</sup>

Distribution is enabled by entities such as Digital Cinema Distribution Coalition (DCDC), which includes all of the major circuits, which owns and operates its own satellite network for distribution. A number of firms have emerged to provide content such as Fathom Events, owned jointly by AMC, Cinemark, and Regal Entertainment with dozens of affiliate exhibitors, provides a single contract point for a variety of music, sports, television, and other alternative content. Having a large scale intermediary as a distributor is essential for exhibitors as the cost of pursuing and licensing content is cost prohibitive for individual exhibitors. The cross-exhibitor cooperation also affords marketing opportunities that are not economically available to an individual exhibitor.

Alternative content can attract repeat visits, such as *Metropolitan Opera Live*, approaching its 10<sup>th</sup> season, which features 10 live events on Saturday afternoons broadcast by more than 700 domestic theaters. The majority of events are single events, often for one night only, tied to a specific target audience. 2012's *Leonardo Live* broadcast for one night only in 500 US movie theaters.<sup>46</sup> Targeted to art lovers who were also fans of Prince, customers could see the kick-off of his concert series live in theaters for one night only.<sup>47</sup> Identifying the communities can be a challenge and surprising. Dan Diamond, VP of Fathom Events, reports being completely surprised by the firm's most successful event: the November 25, 2013 showing of *Dr. Who: The Day of the Doctor* celebrating the 50<sup>th</sup> anniversary of the BBC series. At over \$17,000 per screen, the showings boasted the highest national per-theater receipts for the night.<sup>48</sup> The challenge for exhibitors, accustomed to studio's marketing campaigns promoting that week's box office release, is the development of capabilities in marketing single night events to niche audiences at low cost.

### Immersion Experiences: 4D & Beyond

While 3D viewing is in decline in the U.S., it remains a draw in international markets. Additionally, so called 4D theaters are emerging.<sup>49</sup> These theaters are typically seen as occupying niches within the broader theater experience. A 4D theater utilizes 3D technology and draws the viewer further into the action with added elements such as dynamic seating with moving seats synchronized to the onscreen action. The heavy footsteps of a dinosaur, for example, are simultaneously seen on the screen, heard through the sound system, and felt through a motion seat that rumbles as if being shaken by the footsteps; a car chase becomes a drink spilling experience. Some theaters add additional immersive elements such as scents and off-screen light effects which bring the action of the movie off the screen and into theater.

Exhibitors, producers, and equipment companies are working on interaction elements ranging from simple interactions like shooting on-screen targets with lasers to more complex bullet screens where you can text your thoughts about scenes and the movie and they are projected onto the screen in real time.<sup>50</sup> All are seeking to provide a more immersive and interactive experience than passive sitting and movie watching. Some industry observers anticipate that in the coming years these immersion technologies will be expanded to include feedback systems and story forks where the actions and choices of the audience lead to plot twists and different story outcomes with each viewing. Eventually, the line between what constitutes a movie and a video game may blur.

### Concession Initiatives

Expanding beyond the standard concession stand offers exhibitors opportunities to capture new revenue streams. Three main formats for concessions have emerged.

**Expanded In-Lobby.** Many theaters have expanded the concession counter beyond candy, popcorn and soda. This expanded in-lobby dining causes many theater lobbies to resemble mall food courts. In- and off-lobby restaurants operated or licensed by the exhibitor allow for pre-theater dining. Taking a page from restaurants where a primary profit center is often the bar, some theaters now configure the lobby around a bar, with expanded and upscale fare, beer, and alcohol service.

**In-Theater Dining.** Many theaters have adopted an in-theater dining format where orders are placed from the seat in the theater by a wait staff. Chunky's Cinema Pub, with three New England locations, locates theaters in lower cost underutilized former retail locations. The format combines burger, salad, and sandwich options with beverages, including beer. The format is flat theater with banquet style tables. The seating is unique: Old car seats on castors that allow for easy cleaning. Alamo Drafthouse Cinemas takes a similar approach using a stadium seating configuration. A single bar-style table in front of each row of seats serves as a table for customers' orders. In comparison to traditional theaters, these formats see significant increases in food and beverage sales.

**Upscale Within Theater Dining.** Several circuits are targeting the high end of the theater market, focusing on the experience of the theater with luxurious settings and upscale food. In addition to their standard theaters, AMC has developed Dine-In Theaters with two theater configurations. Their Fork & Screen theaters are much like the Alamo Drafthouse Cinema with enhanced stadium theater seats and in-theater wait service on an expanded menu. Their Cinema Suite theaters make the experience more intimate. Customers, only 21 and older, purchase tickets for specific seats in smaller theaters with reclining lounge chairs with foot rests and in-theater wait service.

Theater chain iPic offers perhaps the most luxurious theater experience available outside of a private screening room, complete with reclining leather chairs, pillows, and blankets. Lobbies resemble stylish high-end hotels and feature a cocktail lounge and full restaurants. Complete with a membership program, the theaters operate more like social clubs than traditional theaters.

Tickets, \$16-\$27 per seat, are purchased not from a ticket booth but from a concierge.

### Advertising Initiatives

Exhibitors are keen to expand highly profitable advertising, but must do so in ways that does not diminish the theater experience. Revenues are generated from advertisements both on- and off-screen. Off-screen advertising such as promotional videos, lobby events and sponsored concession promotions are 9% of revenues. The majority, 91%, comes from on-screen ads for upcoming releases, companies, and products that play before the feature presentation. Both exhibitors and advertisers seek ways to make on-screen ads more palatable to audiences. Many ads are produced in 3D with production quality rivaling a studio release. Theaters are also incorporating innovative technologies such as crowd gaming into ads where the movement or sound of the audience controls on-screen actions. In October of 2008, audiences attending Disney's *Ratatouille* "drove" an on-screen Volvo XC70 through an obstacle course by waving their arms to steer and scoring points for avoiding obstacles. Results were ranked in real-time to audiences in other theaters.<sup>51</sup> The equipment required? A wireless video camera above the screen, a web-enabled laptop containing the game linked to the developer's website and inexpensive motion-sensing technology all linked to the theater's digital projector.

More interactive approaches are on their way: fans at a formula one race in Singapore played the video game *Angry Birds* controlling in-game slingshots used to fling birds at the rival pigs based on voice volume. The louder the crowd, the further the birds were launched.<sup>52</sup> Making ads enjoyable rather than loathed may create an opportunity to increase this small but high margin component of exhibitor revenues. The ultimate advertisement initiative may draw from the pages of free software: the ability to pay a premium for an ad free movie experience.

### Reserved Seating

Movie theaters are among the minority of entertainment which offers tickets without a commitment to the purchasers' viewing experience. Sports and concert goers, for example, always know where they will be sitting in relation to a performance. Movie theaters have long been the province of a first-come, first-select seating model. However, all of the major exhibition chains have incorporated elements of reserved seating – purchasing a ticket tied to a specific seat during a specific showing – into their theaters. These take a variety of forms,

ranging from theaters consisting entirely of reserved seat screens, to specific screens consisting exclusively of reserved seats, to screens with mixed open and reserved options. For the exhibitor, reserved seating requires a reservation and seat selection system and the ability to enforce seating disputes, but comes with additional revenues. Reserved seating is currently one aspect of luxury formats with prices in the \$15 range – about double the industry average.

The argument for widespread reserved seating is perhaps best illustrated in the observations of an India-born ex-patriot currently in the U.S.<sup>53</sup> He observed that the global standard in less developed markets such as India, Singapore, and other countries is to reserve seats in advance and arrive just before the showing starts, assured that the seats will be available. In the developed U.S., by contrast, the standard is to rush to arrive early at the theater so that you can then wait in line for tickets, rush again to get a good seat in the theater, only to then wait more for a movie to start. Trips to the snack bar or restroom need to be coordinated around efforts to keep other patrons out of "your" seats. For this observer, there appears to be no benefit to the viewer for not having reserved seating.<sup>54</sup>

### Dynamic Pricing

The technology needed for reserved seating is a gateway to dynamic pricing systems. Most non-movie events have multiple pricing levels based on seating, night versus day, and weekday versus weekend. Movie theaters, partly due to existing exhibition contracts, commonly have limited flexibility. Matinee and youth and seniors discounts are the primary pricing tiers. Ticketmaster, a leader in event ticket sales, is developing a "dynamic pricing" system which incorporates demand into pricing models.<sup>55</sup> This could mean radical changes with lower ticket prices for off-time and poorly attended movies and increased prices for prime seats at peak times on opening weekend. Thus far, no studio or exhibitor will acknowledge investigating the technology.<sup>56</sup>

### Multi-Entertainment Venues

Many smaller exhibitors are seeking increased profitability beyond movies by reimagining their theaters as multi-entertainment venues. By adding activities such as game rooms, bowling, even laser tag and at-table trivia, theaters become one stop locations for family-friendly entertainment. At theaters chains like Frank Theaters which combine movies, bowling and games for the whole family with dining it is possible to spend an

entertaining evening at the theater without ever seeing a movie.

## Is There A Guardian of the Exhibitors?

While theaters experiment with a variety of initiatives to draw viewers, the clock is ticking. Prior initiatives, most

recently 3D, have failed to live up to their potential as a durable and enduring way to attract audiences. Is one of the initiatives being undertaken by exhibitors an orb hiding a secret infinity stone capable of returning viewer to the theaters? Will a guardian of the exhibitors emerge in 2015? 2016? Or might all future sequels for exhibitors be cancelled?

## NOTES

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