

NOVEMBER 2006

Entertainment Industry

The Long Tail

Aggregation and Context and Not (Necessarily) Content Are King

- **TECHNOLOGY IS DEMOCRATIZING CONTENT CREATION.** The ability to create video content, long the province of the entertainment companies, is becoming more available to the mass market due to low-cost digital video cameras and video editing software. The Internet, with falling storage and bandwidth costs, can act as a global distribution network, giving birth to “user-generated content” (UGC).
- **DRAMATIC INCREASE IN SUPPLY OF CONTENT.** This portends an increase in supply of content to consumers and, potentially, infinite choice. Given constraints on leisure time and disposable income, we think UGC will compete over the long run with Hollywood entertainment, albeit not as perfect substitutes (given lower production values).
- **ENTER THE LONG TAIL.** The Long Tail theory argues that these digital economics and unlimited choice will shift consumers to the “tail” of the demand curve and away from traditional hits at the “head.” Our quantitative analysis of the evolution of increased choice in TV suggests that this theory will be true in the broadband world.
- **VALUE RESIDES IN THE MIDDLE.** If our thesis is correct, we think this increases the value of “middle-men” or packagers of content that can filter out the “noise” associated with unlimited choice and connect users with content that appeals to their interests. Conversely, incumbent creators of content may see slowing growth, although they may be able to offset this by re-releasing library content.

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All pricing is as of the market close on November 16, 2006, unless otherwise indicated.

BEAR STEARNS

Executive Summary

In this report, we take a big picture view of the media and entertainment sector and update our thesis on new technology's impact. In the age-old "content versus distribution" debate, we have historically argued that distribution is at risk of being commoditized over the long run with new competition, shifting the balance of power to content providers and giving new credence to the maxim "Content Is King." However, important changes are afoot at the top of the media supply chain as well.

Technology Is Democratizing Content Creation

The reality is that technological changes are affecting not just distributors of content but the economics and process of content creation as well. The advent of low-cost digital camcorders and video editing software is allowing the mass market to more freely create content. Also, in a digital world, providers of content are not limited by physical shelf space, while server, bandwidth, and other storage and distribution costs are declining. These trends are "democratizing" content creation, taking it out of the hands of just the traditional Hollywood players and TV networks, which is leading to the rise of "user-generated content" (UGC).

Supply of Content Will Increase Dramatically in the Future

We see the emergence of UGC as an alternative and viable form of entertainment. If we are correct, this may augur, over time, for a significant increase in the supply of content available to consumers. Given constraints on leisure time and disposable income, both of which are finite, we think UGC will compete over the long run with content produced by the incumbent Hollywood studios and independent producers (although UGC is unlikely to be a perfect substitute given lower production values).

What This Means: The Long Tail Theory

This trend may portend the "Long Tail" economic theory espoused by Chris Anderson, editor-in-chief of *Wired* magazine and author of the book *The Long Tail*. This theory posits that the Internet and digital distribution eliminates the constraints of shelf space, which allows online services to carry unlimited inventory, leading to theoretically infinite consumer choice and an optimal matching of supply and demand.

As this occurs, consumers will move to the "tail" of the demand curve, creating new niche markets, and away from historical "hits" at the "head" of the demand curve. Moreover, while each niche will be small, Mr. Anderson argues that these niches will further fractionalize share for incumbents and cumulatively the market for niches may exceed the size of the traditional business.

Why History Suggests the Long Tail Is True

So far, most investors have regarded the Long Tail theory as largely just that: *theory*. However, we think television's evolution may be a powerful history lesson to anticipate how the technological changes occurring today may alter the content business in the future.

Over the past 50-plus years, with the help of cable and satellite technology, the one consistent theme in TV has been a marked increase in the number of TV channels, from three in 1950 to more than 105 in 2005 (a 7% compound annual increase). This is essentially a forerunner to the increased entertainment choices the Internet will bring.

In this report, we will use this analogy to quantify and illustrate the Long Tail effect and potential implications of a vast increase in content supply and entertainment choices. More specifically, our parallel with TV finds several main conclusions that we think will be a precursor to the following:

- **Overall Entertainment Demand Will Increase . . .** As the number of TV channels increased, overall TV viewing rose at a 1% CAGR from 1950 to 2005, implying more choice led to a modest increase in demand.
- **. . . But Hits Become Less Big.** However, TV viewing increased slower than TV channels, leading to fragmentation. The average top ten TV show in 1950, for instance, averaged a 44.8 rating versus 13.4 in 2005.
- **Demand Shifts Disproportionately to the Tail.** As TV channel capacity increased, new niche networks found an audience, albeit small. This led to lower viewing for incumbent broadcast networks at the “head” of the demand curve. *Moreover, we will show that the “tail” of the TV viewing demand curve has grown over time with more TV channel choices.*
- **Niche Market Not So Niche.** TV viewership for each new cable channel is (very) small; however, cumulatively, ad-supported cable’s viewing share now dwarfs broadcast viewing on a total-day basis.

Value Will Reside in the Middle of the Supply Chain

If our thesis is correct, one major problem with infinite choice is the potential for overwhelming confusion. Said another way, how do consumers navigate a world of unlimited choice and find what they are looking for? We think this conundrum will increase the value of “middle-men,” or packagers of content that can appropriately *filter* out the noise and connect users with the content that appeals to their interests. This can be done through strong brands, editorial discretion, technology, and harnessing user recommendations.

Business Strategy Implications

We fully acknowledge that our theme will take years to play out and is unlikely to affect near-term earnings. However, we think investing today with a mind toward sustaining future growth is important when an industry is in the early stages of grappling with major changes. In our view, it is unlikely that traditional entertainment firms will be nimble enough to fully capitalize on these changes due to corporate bureaucracy and “the innovator’s dilemma.” This implies that new competitors will emerge and that incumbents will likely need to acquire to participate in this brave new world. This is akin to the failure of most traditional broadcasters (with some notable exceptions) to develop cable network assets in the 1980s and 1990s.

The Media Matrix: Framework for Analysis

TECHNOLOGY IS AN IMPORTANT ENTERTAINMENT SECTOR DRIVER

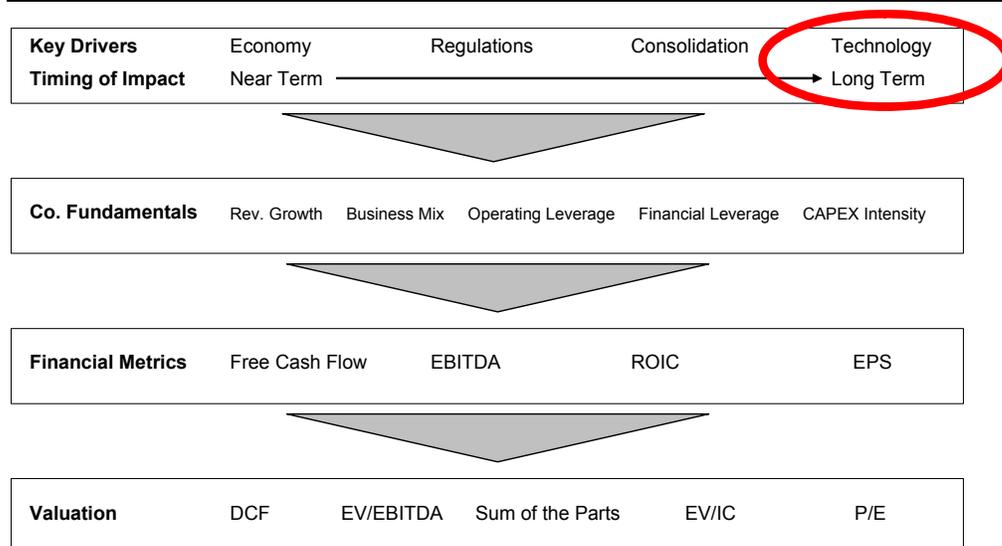
The Impact of Technology on the Entertainment Supply Chain

In Exhibit 1, we present our Media Matrix, which provides our framework for analysis of the entertainment sector. While it remains difficult to fit all media conglomerates into one “box,” our framework isolates major drivers for the sector and highlights our key metrics for measuring and valuing entertainment equities.

In our opinion, there are four themes that broadly affect all major entertainment companies:

- 1. Economy/Ad Cycle.** Entertainment spending is by definition discretionary in nature. In addition, advertising is cyclical. Hence, monitoring the overall health of the economy is important, in our view.
- 2. Regulations.** The media business is highly regulated. Changes in regulations can affect both the fundamentals of media businesses and also the strategic direction of individual companies.
- 3. Consolidation/Deconsolidation.** As we have written often in the past, entertainment conglomerates move through cycles of consolidation and deconsolidation, which have a direct impact on return on invested capital (ROIC).
- 4. Technology.** New technology, by creating new forms of content and new distribution channels, has historically been a positive catalyst for the entertainment sector, although the advent of digital technology is currently viewed as a risk.

Exhibit 1. The Media Matrix



Source: Bear, Stearns & Co. Inc.

Where Are We Coming From?

In early 2006, we argued that new technology will largely be a positive growth catalyst for the entertainment sector going forward, at least for content-oriented companies (as opposed to distribution-centric firms). This is in contrast to the consensus view at the time that new technology represents purely a risk for incumbent content providers.

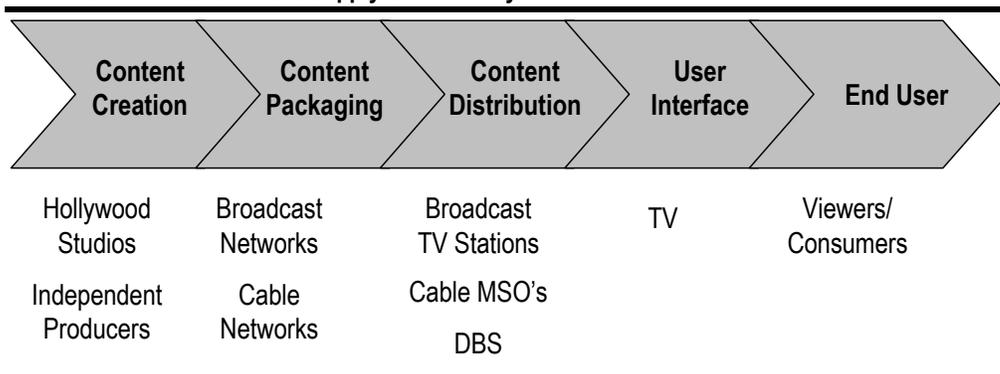
Exhibit 2. Assessing Key Industry Drivers, 2006 vs. 2005

Key Industry Drivers	Positive	Neutral	Negative	Comments
Economy/Ad Cycle		✓		Economic growth positive but likely to moderate
Regulatory Environment		✓		No major changes expected to regulations in the near term
(De)-Consolidation	✓ →		✗	Trend for deconsolidation partially offset by tuck-in acquisitions.
Technology	✓ ←		✗	New technology to bring new opportunities for content owners as cos. focus on digital strategies.

Source: Bear, Stearns & Co. Inc.

To flesh out our investment thesis, we start by laying out the key parts of the entertainment supply chain in Exhibit 3 below. At the top of the supply chain, Hollywood studios and independent producers create content such as films and TV shows, which are packaged together by broadcast and cable networks. In turn, these networks are distributed by broadcast TV stations, cable MSOs, and DBS operators to viewers via television.

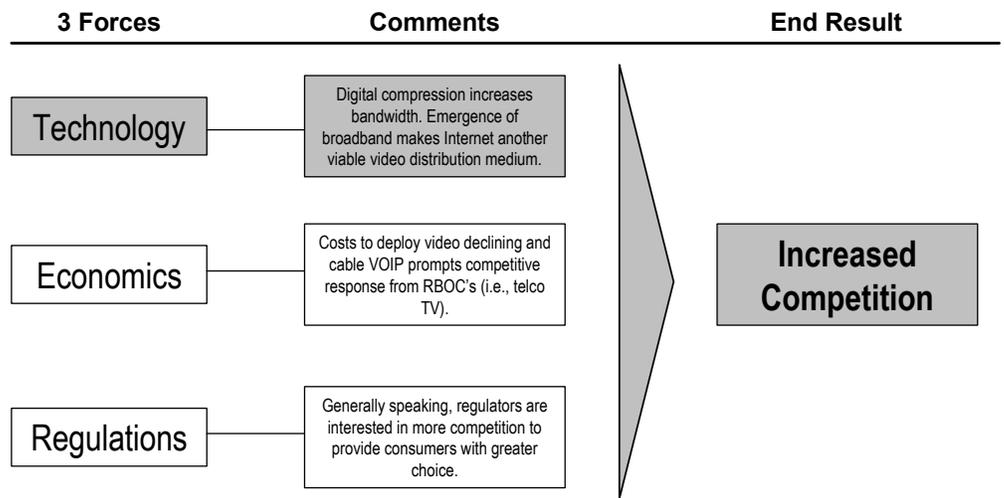
Exhibit 3. The Entertainment Supply Chain Today



Source: Bear, Stearns & Co. Inc.

In assessing the relative attractiveness of each part of the video supply chain, we have argued to date that technological advances (along with economics and regulations) are increasing competition in the distribution segment. Said another way, digital compression increases bandwidth availability, easing historical bandwidth constraints in an analog environment. In addition, the emergence of the Internet and growth in broadband homes makes the Internet an increasingly viable method to distribute video content (see Exhibit 4).

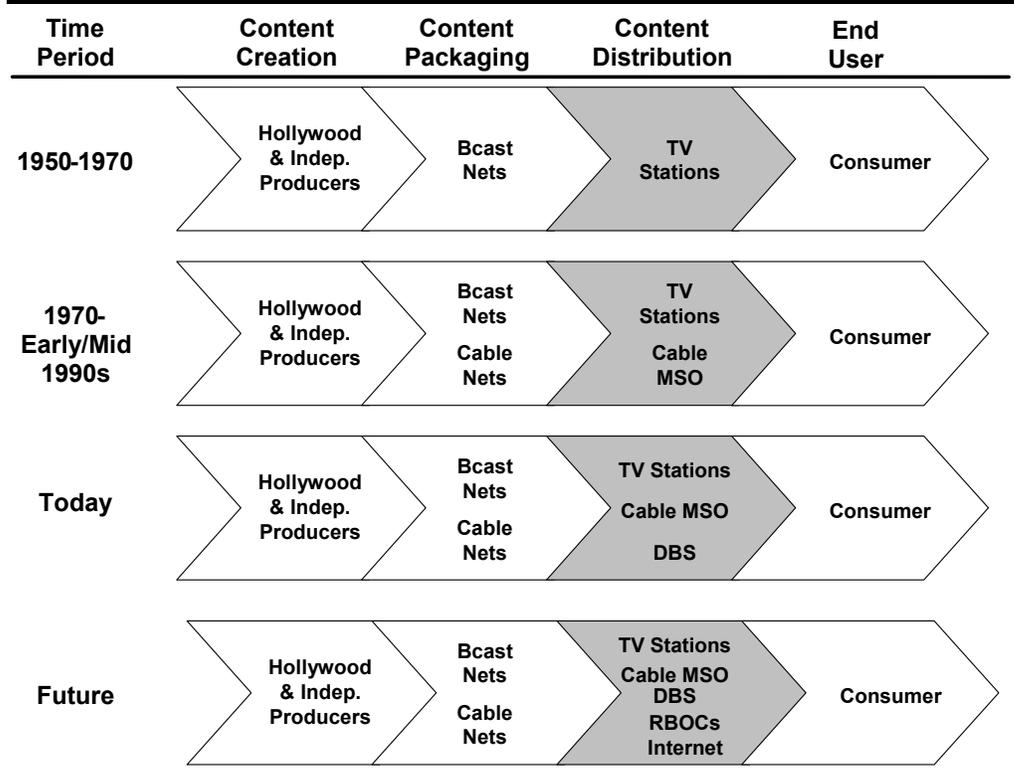
Exhibit 4. Technology Is One of Three Forces Increasing Competition in Distribution



Source: Bear, Stearns & Co. Inc.

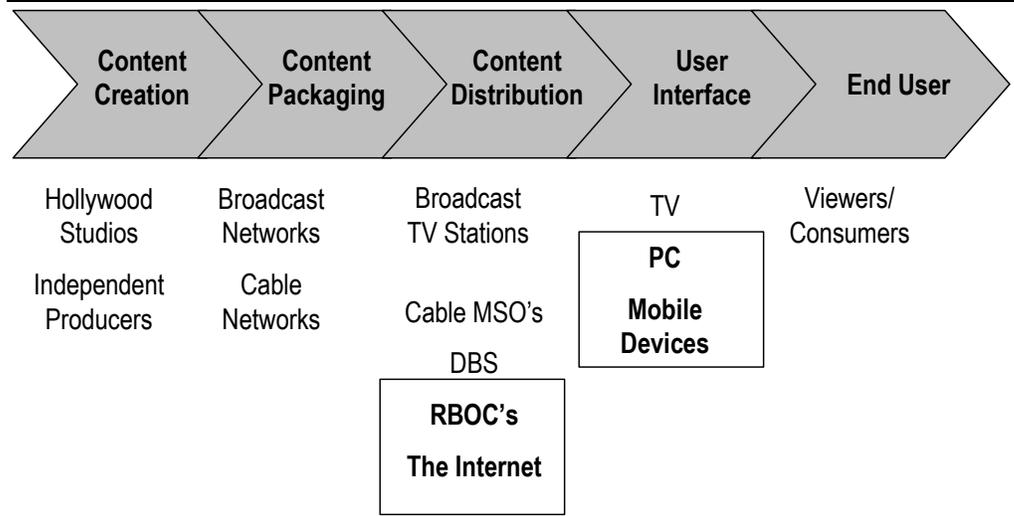
As a result of these three forces, over the past 10-15 years, the multi-channel video distribution business has slowly evolved from an effective monopoly (cable) to a duopoly (cable and DBS), and is advancing toward an oligopoly with the entry of the telephone companies. In addition, we expect that over the next several years, the Internet will emerge as an increasingly viable distribution platform for video content (see Exhibits 5 and 6).

Exhibit 5. Distribution Bottleneck Is Dissipating



Source: Bear, Stearns & Co. Inc.

Exhibit 6. The Entertainment Supply Chain over the Next Few Years

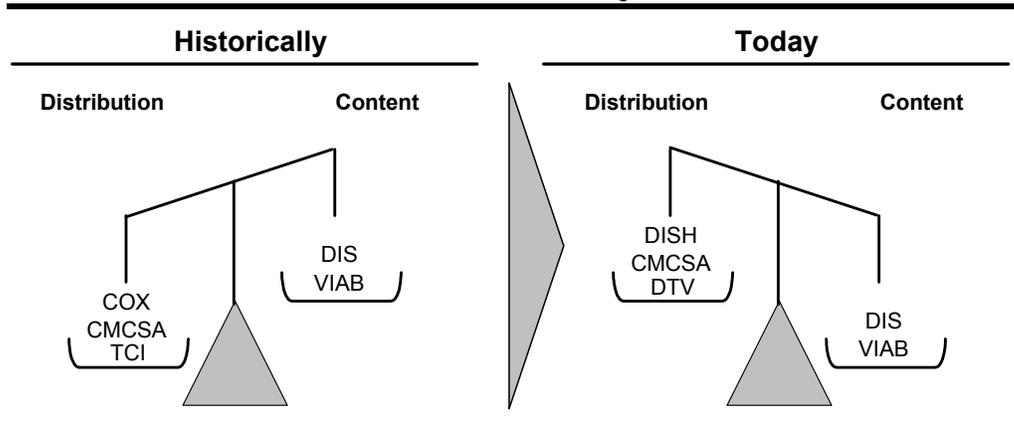


Source: Bear, Stearns & Co. Inc.

As new distribution platforms emerge, the historical bottleneck controlled by cable operators is slowly dissipating. Said another way, in the past, the supply-demand imbalance favored distributors (i.e., cable), which controlled the primary means of reaching consumers, as there was only one MSO and a handful of broadcast TV stations in each market. On the other side of the coin, there were more programming channels than available bandwidth, which allowed cable operators to act as de facto gate keepers to end consumers.

As a consequence, our (and increasingly consensus's) viewpoint has been that the pendulum is swinging back toward content as alternative means of distribution emerge such as DBS, RBOCs, and, ultimately, the Internet (see Exhibit 7). Our positive stance on content providers was also based on our view that new technology, by virtue of greater convenience and choice, has historically grown and not reduced overall demand for entertainment goods and services.

Exhibit 7. Consensus Believes Balance of Power Is Shifting to Content Owners

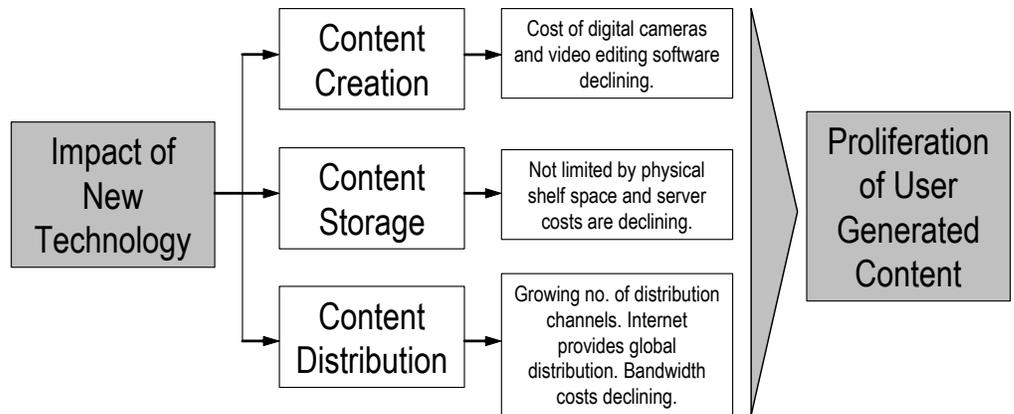


Source: Bear, Stearns & Co. Inc.

More Changes Are Afoot: The Rise of User-Generated Content (UGC)

However, the reality is that technological changes are affecting the economics and process of content creation as well. In other words, the advent of low-cost digital camcorders and video editing software is allowing the mass market to more freely create content. In addition, in a digital world, providers of content are not limited by physical shelf space, while server costs appear to be declining over time. Similarly, distribution (i.e., bandwidth) costs are also coming down. In our view, these trends are “democratizing” content creation, which is leading to the rise of UGC.

Exhibit 8. New Technology Is Changing Economics of Content Creation as Well



Source: Bear, Stearns & Co. Inc.

For example, much of the content on YouTube, a video sharing Web site recently purchased by Google for \$1.65 billion and whose motto is “Broadcast Yourself,” showcases the ability for the average American to cost-effectively create, package, and distribute entertainment video on a global basis.

Exhibit 9. YouTube



Source: YouTube.com.

According to various press reports, YouTube now streams more than 100 million videos per day. Many people remain skeptical that the user-generated video content on YouTube is compelling. Although we do not know what percentage of YouTube’s usage is traditional entertainment content versus UGC, on November 15, 2006, we note that of the top 20 videos viewed, only five, or 25%, were traditional TV content.

While we understand that some investors may regard the notion of high demand for essentially home videos as preposterous, we note that this concept is not new. For example, the show “America’s Funniest Home Videos” has been a staple of television for years. Also, new forms of content are generally unimpressive at first. For instance, in the early days, ESPN covered events like ultimate Frisbee competitions, while Ted Turner’s CNN was met originally with the notion, “Who wants to watch news 24 hours a day?”

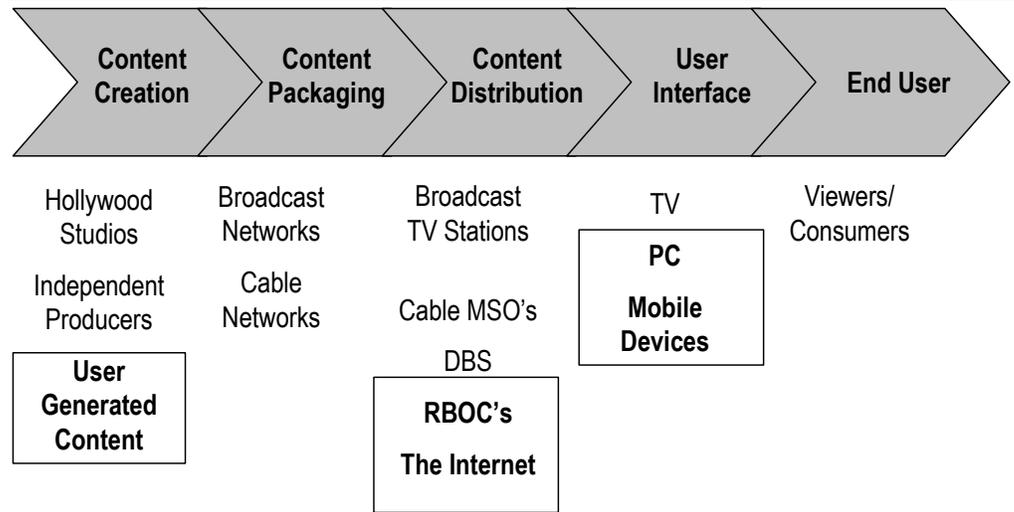
Exhibit 10. Most-Viewed Videos on YouTube, November 15, 2006



Source: YouTube.com.

To be clear, we are not suggesting that traditional hits will go away, but that user-generated content can develop over time into an alternative form of entertainment. In our view, consumers will always have a desire to watch a blockbuster movie or a hit TV show. However, given constraints on consumers’ leisure time and disposable income, both of which are finite, we believe UGC will compete over the long run with content produced by the incumbent Hollywood studios and independent producers (although UGC is unlikely to be a perfect substitute given lower production values).

Exhibit 11. Technology Is Leading to a Proliferation of Content



Source: Bear, Stearns & Co. Inc.

PURPOSE OF THIS REPORT

Several Strategic Questions Emerge

In light of this industrial backdrop, in this report, we examine the implications of how technology is altering the economics of content creation and the rise of user-generated content. In our opinion, this emerging trend provokes several important strategic questions for investors in the entertainment sector, including:

1. How will overall demand for entertainment be affected?
2. Will niche, user-generated content find an audience?
3. How will incumbent creators of content fare?
4. Will new competitors arise?
5. Where will the most value reside in the supply chain?

The balance of this report will focus on attempting to answer these questions. Although these themes will likely play out over the long run and may not necessarily affect near-term estimates or operating fundamentals of the major media conglomerates, we view these changes as important strategic issues for the industry. In addition, these issues may influence investor sentiment and the terminal values that the investment community awards entertainment stocks. Should this occur, valuation multiples for media stocks could be affected even though the near-term earnings impact may be negligible.

Enter the Long Tail

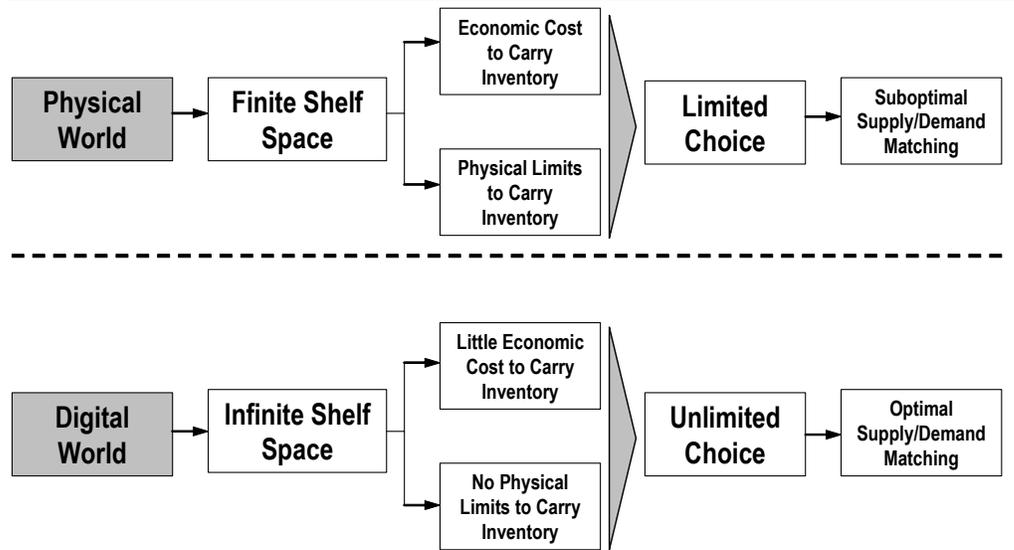
THE LONG TAIL THEORY OF ENTERTAINMENT

In our view, the emergence of user-generated content is representative of “The Long Tail” economic theory espoused by Chris Anderson, editor of *Wired* magazine and the author of the book *The Long Tail*.” In this theory, Mr. Anderson posits that “*if the 20th-century entertainment industry was about hits, the 21st will be equally about misses.*”

To clarify and expand, Mr. Anderson argues:

- Historically, the physical world has constrained the amount of inventory retailers/distributors can carry.
- This led to a focus on “hits,” or products that could generate large enough sales to cover the cost of carrying these goods (i.e., the rent or cost for shelf space).
- These constraints limited consumer choice and led to a suboptimal matching of supply and demand.
- However, digital technology and the Internet now allow online services (like Amazon.com, for instance) to carry far more inventory than traditional retailers at very little marginal cost and with no physical limits.
- This results in an exponential increase in choice for the consumer and the potential for a much more optimal matching of supply and demand.
- The ability to provide near-infinite choice for consumers reveals that virtually all niche products, no matter how obscure or esoteric, find some level of demand or audience. This is the Long Tail.
- While demand for these individual niches in many cases is small, cumulatively these non-hits are a market potentially as large as the hits.

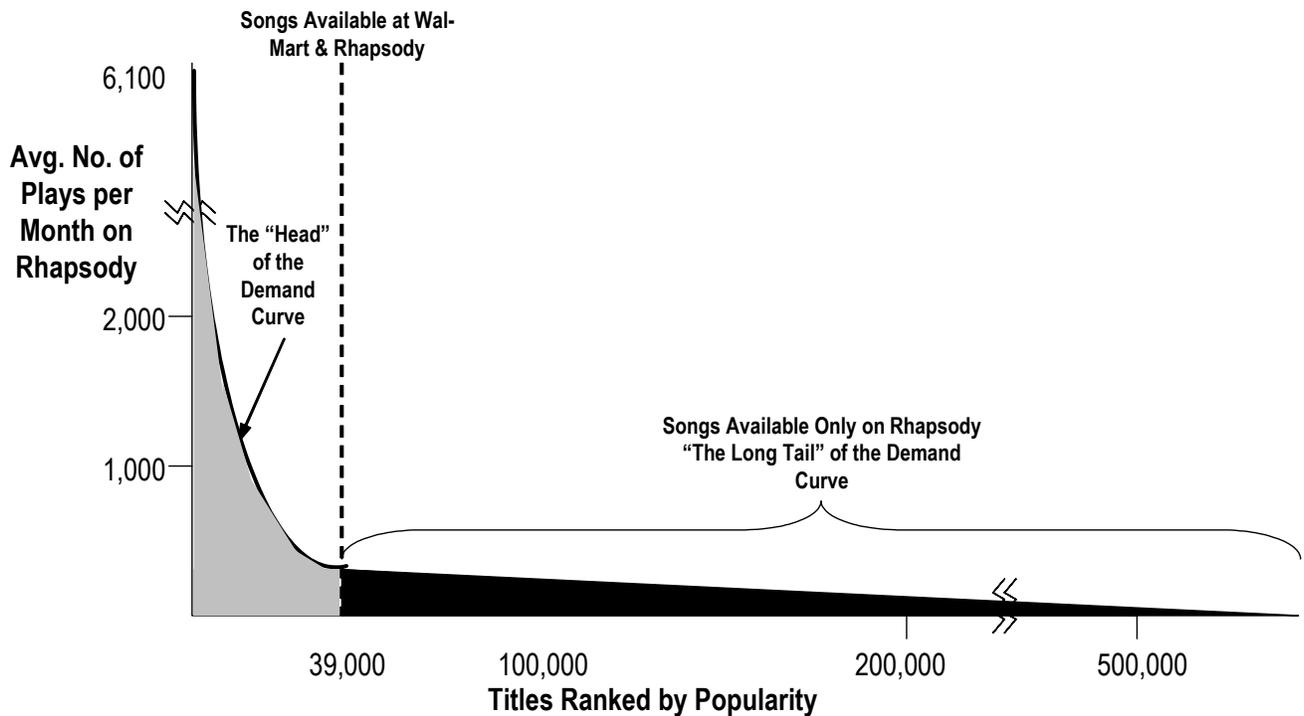
Exhibit 12. What Is the Long Tail?



Source: *The Long Tail*; Bear, Stearns & Co. Inc.

To illustrate his point, Mr. Anderson shares several examples in his book, such as the fact that Rhapsody, an online music service, carries 19 times more songs than Wal-Mart’s inventory of 39,000. Yet, according to *The Long Tail*, 99% of Rhapsody’s songs are streamed once a month. This results in the following demand curve:

Exhibit 13. Average No. of Plays per Month on Rhapsody vs. No. of Songs Ranked by Popularity



Source: *The Long Tail*.

Potential Implications of the Long Tail: Our Hypothesis

We utilize Mr. Anderson's Long Tail concept as a starting point for our analysis of how the proliferation of video content choices may affect the entertainment industry. We then juxtapose his theory with our original data analysis to explore the strategic questions we outlined on page 14. To begin, we offer three main hypotheses, several of which are in line with the Long Tail theory:

1. Overall Demand for Entertainment Will Likely Increase.

- Increased convenience and choice historically grows demand.

2. Market Share Will Fragment Further.

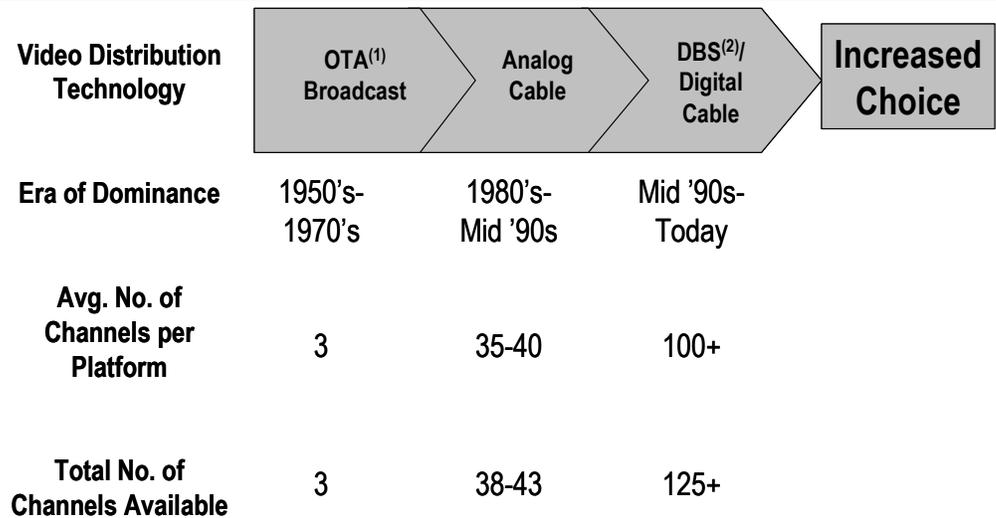
- Consumers are still constrained by their limited amount of leisure time and disposable income.
- "Hits" will remain but will be less big.
- A disproportionate amount of incremental demand shifts to the "tail" of the demand curve.
- Incumbents (i.e., traditional studios and networks) have the most market share to lose.

3. Individual Niches Will Be Small, But Cumulatively Large.

- Owners of large libraries stand to benefit . . .
- . . . But altogether new niche content will find demand as well.

To prove our hypotheses, we use the evolution of television as a parallel to understand how increased entertainment choices may affect consumption, overall demand, and market shares. As shown in Exhibit 14, TV originally was distributed through finite analog spectrum. As a result, through much of the 1950-70s era, most consumers could only watch three national TV networks (ABC, CBS, and NBC). However, cable's coaxial cable architecture created the birth of cable networks like MTV, increasing viewing options from three to around 35-40 analog basic cable networks. By the mid-1990s, satellite TV and cable's upgrade to hybrid fiber coaxial (HFC) cable allowed for more than 100 television channels. In our view, this is not dissimilar to how broadband Internet will likely increase viewing choices for users.

Exhibit 14. Technology Has Increased TV Viewing Choices over Time



(1) OTA = Over the Air.
 (2) DBS = Direct Broadcast Satellite.

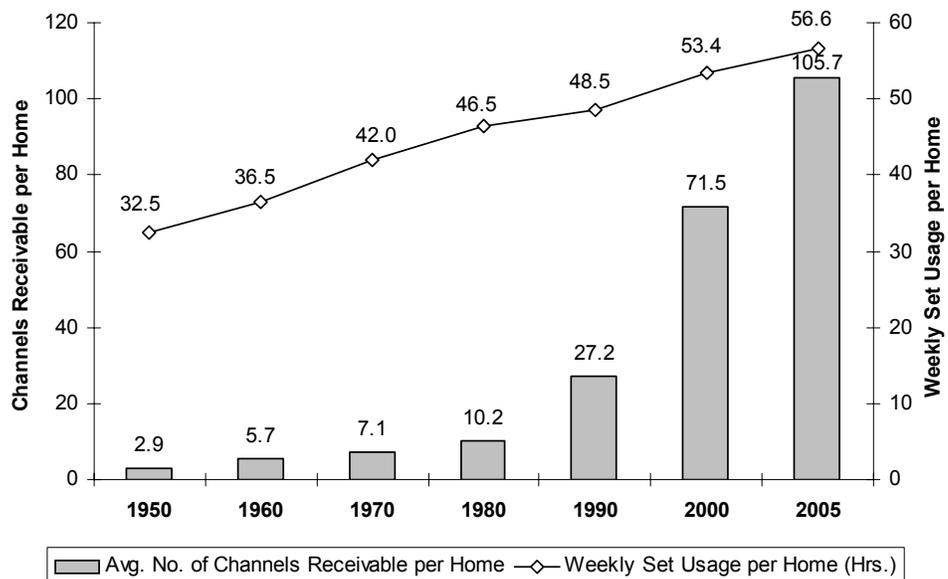
Source: Bear, Stearns & Co. Inc.

**INCREASED CHOICE
AND CONVENIENCE
GROWS DEMAND**

1. Overall Demand for Entertainment Will Likely Increase

TV channel proliferation over the last 55-plus years led to increased viewing choices for consumers. From 1950 to 2005, the average number of channels per home increased at a 7% CAGR, from about three to more than 105. Over the same time period, TV usage as measured by hours of TV watched per week, jumped from 32.5 hours in 1950 to close to 57 hours in 2005, a 1% CAGR. We think this increased TV usage in the face of more channels suggests that more choice will drive modestly higher demand.

Exhibit 15. Increased Choice Drove Higher TV Usage

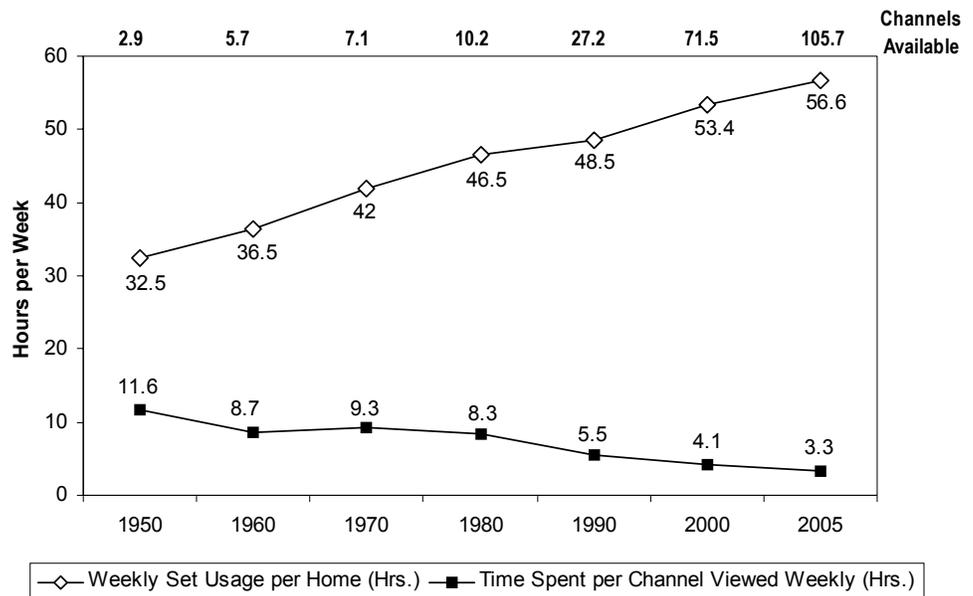


Source: Media Dynamics; Bear, Stearns & Co. Inc.

2. Market Share Will Fragment Further

However, as has been well-documented, more choices mathematically lead to more fragmentation. As shown in Exhibit 16, TV usage did not grow as fast as the total number of networks available. As a consequence, the amount of time spent per channel decreased.

Exhibit 16. However, Audiences Are Fragmented

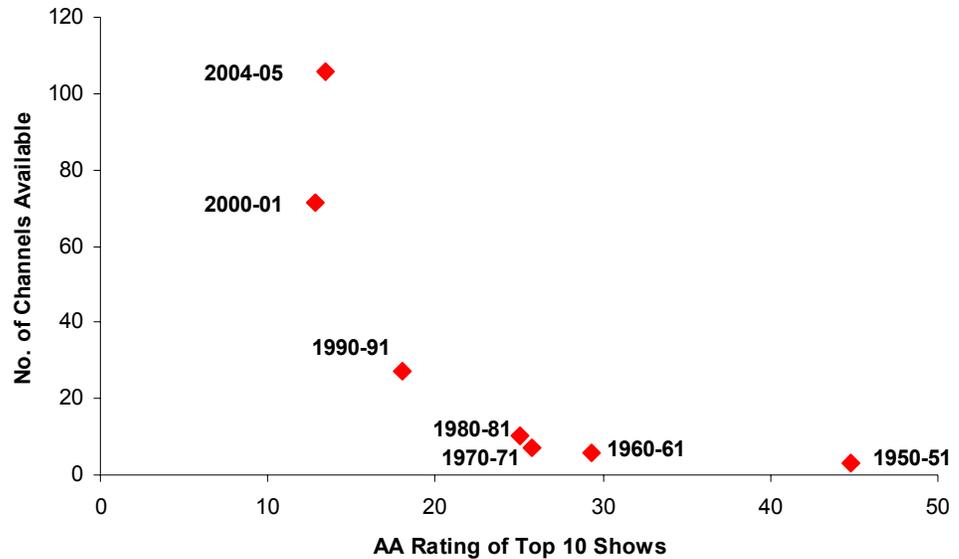


Source: Media Dynamics; Bear, Stearns & Co. Inc.

THE HITS BECOME LESS BIG

As a result of this fractionalization of audiences, hit shows became less big. In Exhibit 17, we plot the average rating of the top ten TV shows over time against the number of channels available. This analysis shows that the average top ten TV show in the 1950-51 season averaged a 44.8 rating. In contrast, as TV viewing choices rose, this figure fell to 29.3 in 1960-61, and to 13.4 in the 2004-05 season.

Exhibit 17. Hits Became Less Big



Source: Media Dynamics; Bear, Stearns & Co. Inc.

DISPROPORTIONATE AMOUNT OF INCREMENTAL DEMAND SHIFTS TO “TAIL” OF DEMAND CURVE

The Long Tail of TV Viewing

In order to understand how demand for video will be distributed among more entertainment options, it is necessary to build a TV viewing demand curve. To do this, we first start with TV audience share data from the Cable Advertising Bureau (CAB), which is segmented into viewing for three broad categories: 1) the Big Three affiliates, 2) ad-supported cable, and 3) other (including pay cable and independent TV stations).

We then combine this with data on total number of channels from Media Dynamics. Assuming three channels for each of the Big Three affiliates, the difference between the total number of channels and the Big Three equals the number of channels for ad-supported cable and other.

To calculate viewing share per channel, we then divide the viewing share for the Big Three affiliates by the three associated networks. We also divide audience share for ad-supported cable and other by the implied number of networks for this category. This assumes that audience share is evenly distributed with each of the two buckets (“Big Three” and “ad-supported and other”). This is because we do not have access to individual ratings for each channel.

Exhibit 18. Data for Deriving the TV Viewing Demand Curve

	Share of Total Day Viewing					No. of Channels			Viewing Share/Channel	
	Big 3 Affiliates	Ad- Supported Cable	Other ⁽¹⁾	Ad Supported Cable & Other		Big 3 Affiliates	Ad Supported Cable & Other	Total	Big 3 Affiliates	Ad Supported Cable & Other
				Total	Total					
1986/87	60.7	11.8	27.5	39.3	100					
1987/88	57.0	13.8	29.2	43	100					
1988/89	54.9	16.2	28.9	45.1	100					
1989/90	52.6	19.5	27.9	47.4	100					
1990/91	50.2	22.7	27.1	49.8	100	3	24	27	16.7	2.1
1991/92	50.3	23.4	26.3	49.7	100					
1992/93	49.4	24.4	26.2	50.6	100					
1993/94	48.5	24.6	26.9	51.5	100					
1994/95	43.9	28.1	28.0	56.1	100					
1995/96	42.0	30.3	27.7	58.0	100					
1996/97	39.5	32.7	27.8	60.5	100					
1997/98	37.4	35.0	27.6	62.6	100					
1998/99	34.0	36.7	29.3	66	100	3	44	47	11.3	1.5
1999/00	33.0	38.1	28.9	67.0	100					
2000/01	30.7	41.1	28.2	69.3	100	3	69	72	10.2	1.0
2001/02	28.4	44.3	27.3	71.6	100					
2002/03	26.8	45.4	27.7	73.1	100					
2003/04	26.2	46.5	27.3	73.8	100					
2004/05	24.4	48.3	27.3	75.6	100	3	100	103	8.1	0.8

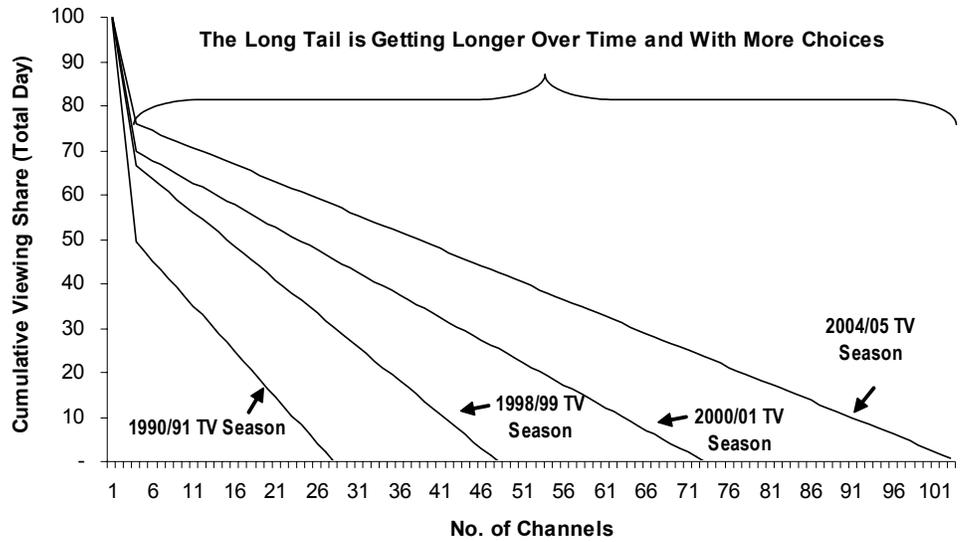
(1) Includes independents, pay cable, WB/UPN/PAX affiliates, PBS, and all other cable. All shares based on sum of total U.S. HH delivery (not HUT).

Source: CAB; Media Dynamics; Bear, Stearns & Co. Inc. estimates.

We can then take this mathematical exercise to draw the demand curve for each season, although we only have a full data set for the 1990-91, 1998-99, 2000-01, and 2004-05 TV seasons. We have plotted these demand curves in Exhibit 19 to illustrate the TV viewing demand curve and how it has changed over time as the number of channels has proliferated.

This analysis shows that TV viewing does indeed have a long tail. Said another way, as the number of channels increased, each new niche channel that was developed found an audience, albeit small, relative to the incumbent three broadcast networks. As a result, the incumbent broadcast networks at the “head” of the demand curve saw their market share of viewing decline over time. Moreover, it appears that the “tail” of the TV viewing demand curve has increased over time with more TV channel choices.

Exhibit 19. The Changing Shape of the TV Viewing Demand Curve



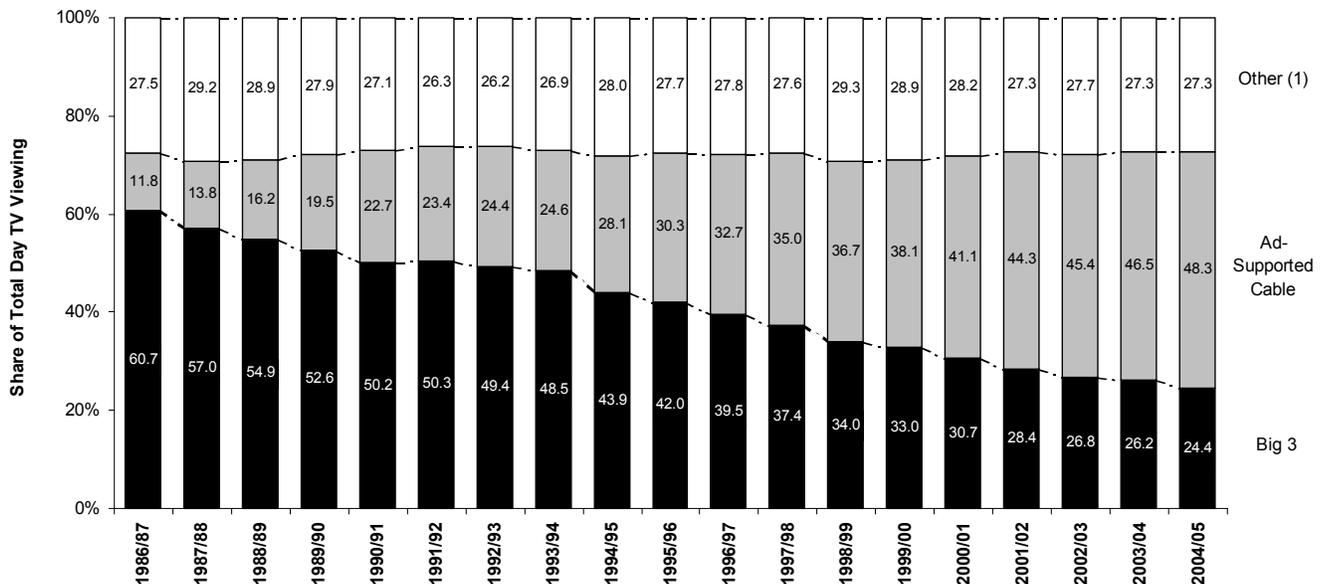
(1) Includes independents, pay cable, WB/UPN/PAX affiliates, PBS, and all other cable. All shares based on sum of total U.S. HH delivery (not HUT). Channels ranked by popularity.

Source: CAB; Media Dynamics; Bear, Stearns & Co. Inc. estimates.

INCUMBENTS (I.E., TRADITIONAL STUDIOS) HAVE MOST MARKET SHARE TO LOSE

Our work finds that viewership of each of these new channels is very limited. However, consistent with the Long Tail theory, in combination, these niches aggregate to a very large market. As shown in Exhibit 20, for instance, while ad-supported cable and other channels average only a 1% share of viewing per channel, in aggregate, they dwarf the viewing share of the Big Three, which stands at 24% in the 2004-05 season. In contrast, ad-supported in total now claims more than 48% of TV viewing on a total-day basis.

Exhibit 20. Individual Niche Networks Small, But Cumulatively Larger than Broadcast



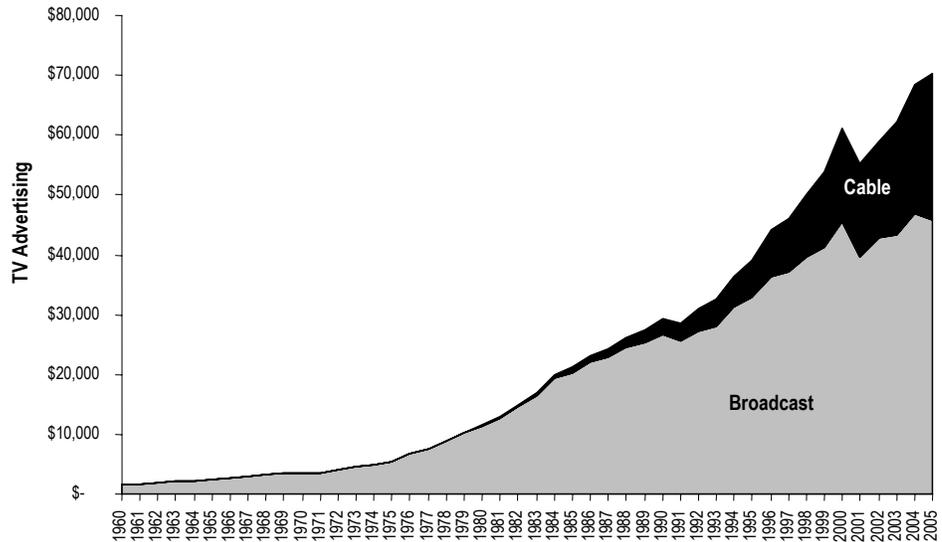
(1) Includes independents, pay cable, WB/UPN/PAX affiliates, PBS, and all other cable. All shares based on sum of total U.S. HH delivery (not HUT).

Source: CAB; Media Dynamics; Bear, Stearns & Co. Inc. estimates.

The Long Tail Market Could Be Large, But Will Take Time to Develop

Now that we have illustrated the consumption behavior of TV in the wake of more choices, we turn our attention to the revenue opportunity. To do this, we look at the amount of TV advertising to broadcast networks (the “head” of the demand curve) versus cable networks (the historical “tail” of the demand curve).

Exhibit 21. Cable vs. Broadcast TV Advertising, 1960-2005 (\$ in millions)

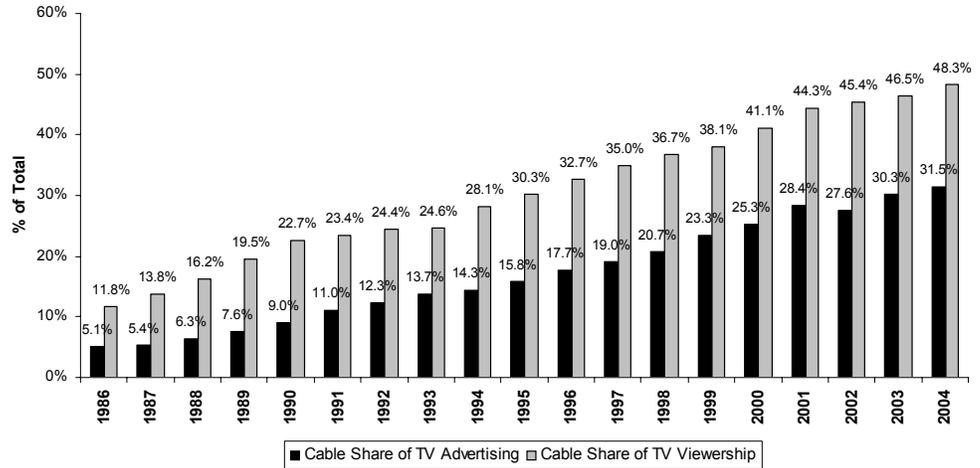


Source: Universal McCann; Jack Myers Reports; Bear, Stearns & Co. Inc. estimates.

According to Universal McCann, in 2005, broadcast advertising amounted to \$45 billion, almost double the size of cable advertising. However, with cable advertising totaling \$24.5 billion, this is a sizable revenue market and now represents more than one-third of total U.S. TV ad spending — and we have not even included affiliate revenues for cable programmers. Obviously, this aggregate amount of cable advertising is spread across more niche channels, implying that the revenue per channel is smaller.

We do note that cable advertising’s share of the ad pie is still lagging its share of TV viewing. This is due to several issues such as less mass market reach than broadcast (which affects audience duplication and the speed of viewership accumulation) and, in some cases, a more cluttered environment. As a result, advertisers still do not view cable as a perfect substitute (yet) for broadcast.

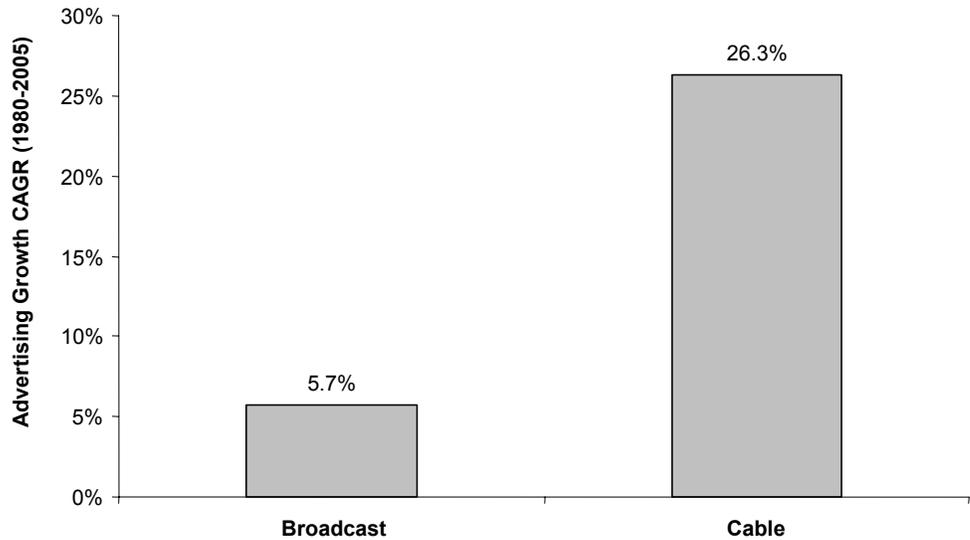
Exhibit 22. Cable TV Share of Total TV Advertising vs. Viewership, 1986-2004



Source: Universal McCann; Jack Myers Reports; Bear, Stearns & Co. Inc. estimates.

This suggests that the Long Tail market will take time to develop, but will indeed emerge. We also note that coming off of a low base will result in faster growth.

Exhibit 23. Compound Annual Growth Cable vs. Broadcast Advertising, 1980-2005



Source: Universal McCann; Jack Myers Reports; Bear, Stearns & Co. Inc. estimates.

The Future: Aggregation and Context, Not Content, Are King

A BRAVE NEW WORLD

The Sweet Spot May Be in the Middle of the Supply Chain

So far, using the evolution of TV as a parallel, we have shown that increased entertainment options will increase overall demand, but further fractionalize share. While these new niches will likely be small, they will likely be cumulatively large from both a unit and revenue standpoint. In our view, the advent of broadband video will likely exponentially increase choice (see Exhibit 24) as more use-generated content and other mid-tier content that previously could not secure distribution emerge.

Exhibit 24. The Future Will Bring Infinite Choice

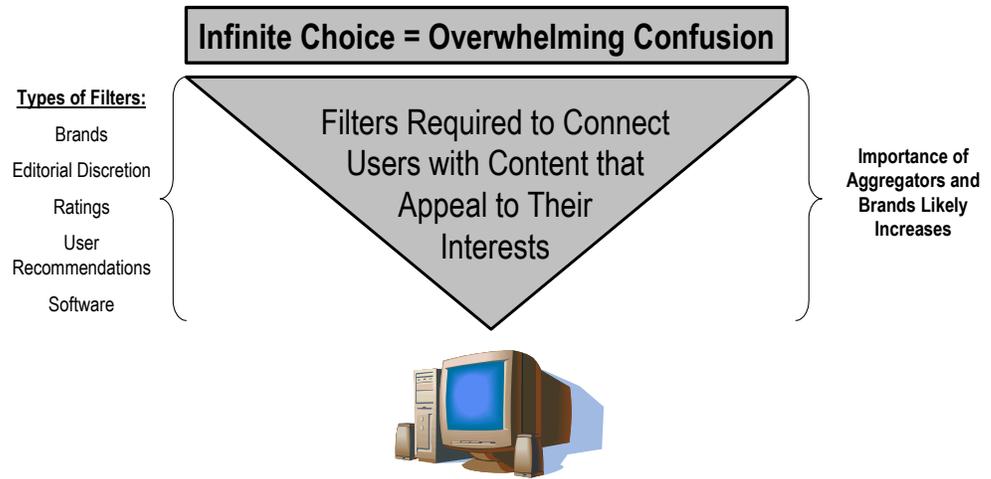
Video Distribution Technology	OTA ⁽¹⁾ Broadcast	Analog Cable	DBS ⁽²⁾ / Digital Cable	Broadband	Infinite Choice
Era of Dominance	1950's-1970's	1980's-Mid '90s	Mid '90s-Today	The Future	
Avg. No. of Channels per Platform	3	35-40	100+	Infinite	
Total No. of Channels Available	3	38-43	125+	Infinite	

(1) OTA = Over the Air.

(2) DBS = Direct Broadcast Satellite.

Source: Bear, Stearns & Co. Inc.

One obvious problem with infinite choice is the possibility of overwhelming confusion for users. In other words, how do consumers navigate a world of unlimited choice and find what they are looking for? Herein lies the need for “middle-men” that can appropriately *filter* out the noise and connect users with the content that appeals to their interests.



Source: Bear, Stearns & Co. Inc.

**EXISTING BRANDS
WILL ENDURE
WITH PROPER
INVESTMENT AND
DIFFERENTIATION . . .**

Filters can take many forms. For example strong, differentiated brands that resonate with consumers, like *MTV* and *Home & Garden*, for instance, can act as a guide for users to find content that suits their interests. Similarly, companies well-known for editorial discretion (i.e., The New York Times Co.) can also help consumers navigate the vast sea of content. Alternatively, software can also act as an effective filter with user ratings and recommendations helping to connect consumers with their interests.

Therefore, as investors ponder the implications of these seismic changes in the entertainment industry and the most attractive investment opportunities, we theorize that *the most attractive part of the supply chain may reside in the middle with packagers of content*, those that can most effectively sift through the noise and connect users with content that fits their interests.

While there will always be a need for “great content,” we think that incumbent creators of content could suffer market share losses over time to UGC, much as the broadcast networks did to start up cable networks. The offset, though, is that entertainment firms could see increased revenues from re-releasing library content. On the other end of the spectrum, we maintain our view that increased competition, partly driven by technology, will erode the marginal economics of the distribution portion of the supply chain. However, more choice may increase the value of packagers of content as consumers look to navigate a sea of infinite choice.

**. . . HOWEVER, NEW
VIABLE
AGGREGATORS WILL
EMERGE . . .**

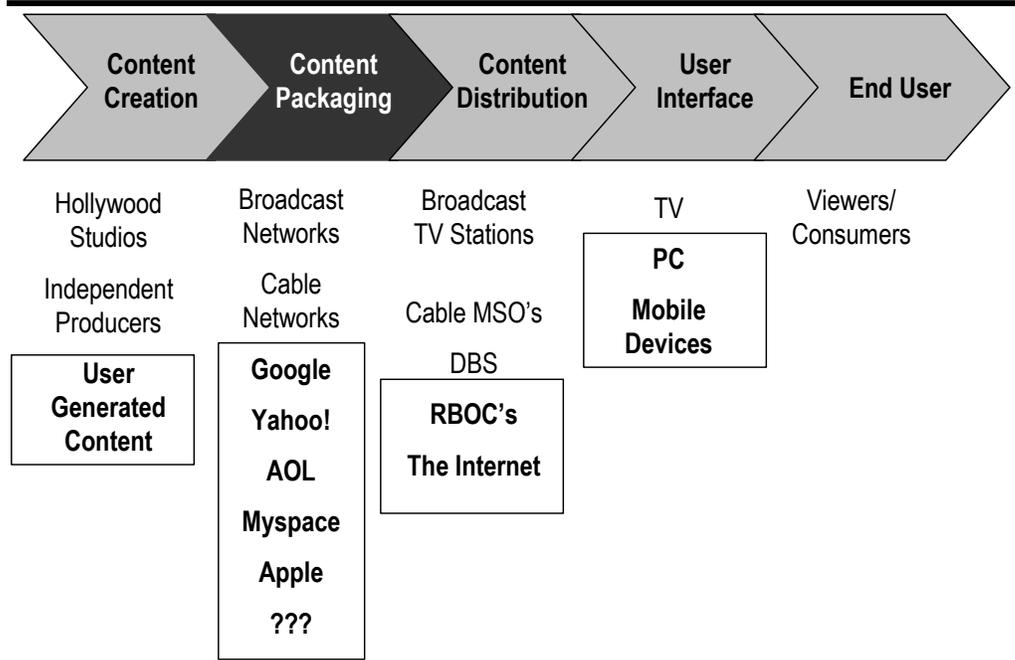
Business Strategy Implications

As a result, we think that many existing content packagers and brands can endure and thrive in this brave new world with the proper nurturing, investment, and differentiation. As a result, we feel that many cable programmers, like Viacom, are strategically well-positioned. However, other incumbents lacking differentiation (general entertainment cable networks come to mind) may be structurally challenged.

We also think there is a high probability that other new competitors will emerge and become very viable. Certainly, Google, with its recent YouTube acquisition, can play a central role as a middle man between users and infinite content choices. Similarly, other online portals and communities such as AOL, Yahoo!, and Myspace

appear to be at the forefront of this movement. It also seems fairly probable that other, as-yet-to-be-determined companies will emerge from out of nowhere to play a role, as YouTube did not exist 24 months ago.

Exhibit 26. The Sweet Spot May Be in the Middle of the Supply Chain



Source: Bear, Stearns & Co. Inc.

**... AS THEY DID IN
CABLE
PROGRAMMING**

Going back to our earlier analogy, our theory is not dissimilar to the development of multi-channel video. As the cable programming business grew, most incumbents were complacent and too slow to fully capitalize on the opportunity. As a result, most had to employ an acquisition strategy to “get in the game.” In the meantime, pure-play cable programmers like Viacom and Discovery blossomed and flourished (see Exhibit 27).

Exhibit 27. Cable Gave Birth to New Competitors; Incumbents Had to Acquire

Company	Broadcast Property	Key Cable Properties	Build vs. Buy
CBS	CBS CW (50%)	CSTV	Buy
GE	NBC	CNBC, Bravo	Hybrid
Disney	ABC	ESPN, Disney Channel, ABC Family	Hybrid
News Corp.	FOX My Network TV	Fox News, F/X, Speed	Hybrid
Viacom	None	MTV, NICK, SPIKE, Comedy Central, TV Land	Hybrid
Time Warner	CW (50%)	TBS, TNT, CNN, Court TV	Buy
Discovery	None	Discovery, Disc. Health, Disc. Wings, etc.	Build

Source: Bear, Stearns & Co. Inc.

Investment Conclusion

SO, WHAT HAVE WE LEARNED?

Evolutionary AND Revolutionary

In the next exhibit, we summarize the key findings of our industry research, juxtaposed alongside the strategic questions we outlined earlier.

Exhibit 28. Summary of Key Research Findings

Key Questions	Conclusions
1. How Will Overall Demand for Entertainment be Impacted?	Demand for video is likely to increase due to more choice and convenience.
2. Will Niche, User Generated Content Find an Audience?	Yes. Everybody's tastes diverge from the mainstream at some point.
3. How Will Incumbent Creators of Content Fare?	Owners of libraries can re-distribute old content, but may lose share to new user generated content.
4. Will New Competitors Arise?	Yes. Start-ups are likely to be more nimble.
5. Where Will the Most Value Reside in the Supply Chain?	Value of aggregation and brands increases with exponential increase in content choices.

Source: Bear, Stearns & Co. Inc.

Keys to Success

For incumbent media companies, the winds of change appear to be gathering force. In our opinion, with industry dynamics in flux, incumbents must guard against:

- **Complacency.** Change is coming and will affect legacy businesses. Companies living in denial will likely see core businesses erode.
- **The Innovator's Dilemma.** As traditional models change, managements should innovate even if core businesses may be cannibalized. Our analogy to TV suggests that increased choice will not destroy legacy businesses as much as slow growth, since much of the incremental growth shifts to the tail of the demand curve.
- **Bureaucracy/Corporate Infighting.** Media conglomerates are notorious for bureaucracy and corporate infighting. In our view, this slows decision making and innovation.

Assessing the Entertainment Companies

If our thesis is correct, the next logical question for investors is what factors will decide which companies succeed in this market environment? In this final section, we look at the asset mixes and digital media strategies of the four major entertainment conglomerates we cover to attempt to answer this question.

Exhibit 29. Dissecting Entertainment Conglomerates

Supply Chain	Business Segment	DIS	NWS	TWX	VIAB
Content Production	Film/TV Production	5%	25%	15%	6%
	Books/Magazines	0%	10%	0%	0%
	Newspaper	0%	19%	10%	0%
Content Packaging	Broadcast Network	3%	(2)%	(4)%	0%
	Cable Networks	40%	19%	30%	100%
	Online Portal	NA	NA	15%	NA
	Radio Network	0.2%	0%	0%	0%
	Cable MSO	0%	0%	38%	0%
	DBS	0%	5%	0%	0%
Content Distribution	Broadcast Stations	7%	24%	0%	0%
	Radio Stations	3%	0%	0%	0%
	Parks/Other/Corp. Exp.	41%	0.3%	(5)%	(6)%

Source: Company reports; Bear, Stearns & Co. Inc. estimates.

If our industry thesis is correct, we believe that entertainment companies with the largest exposure to the middle of the supply chain (i.e., aggregators of content) will be relatively better-positioned. As shown in Exhibit 29, on this basis, it appears that Viacom, which is largely a pure-play cable programmer, is best-positioned. Time Warner and Disney have the next-largest exposure to this segment of the supply chain. While News Corp. has the lowest exposure, we do believe that its Myspace acquisition provides a strong platform to participate in broadband video. We now turn our attention to analyzing the strategies of each company.

News Corp.: Getting Religion

In 2005, News Corp. embarked on a rapid Internet expansion, which quickly culminated with its successful acquisition of Myspace. Myspace is a social networking site that has witnessed outstanding traffic growth and now ranks as the No. 2-most-visited destination on the Web. We believe that Myspace could emerge as a central hub for video and user-generated content. The risk for News Corp., as with other incumbent players, is slowing growth for its traditional media businesses.

Time Warner: A Lot of the Pieces in Place

Time Warner is arguably the most diversified of the major entertainment conglomerates. After years of struggling with its declining dial-up subscriber base, AOL recently embarked on a “free” strategy that aims to position it as a major portal. We also regard AOL’s early investments in broadband video and content as giving it an early leg up on the competition. However, its diversification also means several of its other businesses are at risk. Most notably, we believe the Turner entertainment

networks (TNT, TBS) are particularly at risk in light of their general entertainment strategy and reliance on licensed content from Hollywood studios for movies and off-network re-runs from syndicators.

Viacom: Nice Asset Mix, But What’s the Strategy?

Viacom currently has the greatest exposure to the middle of the supply chain, where we see the most value accruing in the future. With strong differentiated brands like MTV and Nickelodeon, 95% of Viacom’s EBITDA is derived from content packaging. However, this is counterbalanced by the lack of a well-articulated digital strategy (outside of selective “tuck-in” acquisitions). Moreover, the recent departure of well-regarded CEO Tom Freston creates more uncertainty over Viacom’s long-run strategic direction.

Walt Disney: Strong Brands

To its credit, Disney management has been aggressive on the new technology front, spearheading the availability of traditional TV and movie content on Apple’s iTunes format. In addition, Disney has begun to make available several of its hit ABC shows on-line, via streaming video. Disney also has strong brands that resonate with consumers, like “Disney” and “ESPN.” However, outside of broad strategies such as focusing on “content” and “new technology,” Disney has yet to articulate a detailed overarching strategy for its digital plans.

Exhibit 30. Dissecting Entertainment Conglomerates

Company	Key Long Tail Assets	Risks
TWX	AOL	Turner Networks
NWS	Myspace	Slowing Growth for Traditional Media Assets
VIAB	MTV, Nickelodeon and Other Brands	Lack of Detailed Digital Strategy
DIS	“Disney” and “ESPN” Brands	Lack of Detailed Digital Strategy

Source: Company reports; Bear, Stearns & Co. Inc. estimates.

Companies mentioned under coverage:

Cable and Satellite TV: Market Weight

Comcast Corp. (CMCSA-40; Outperform)

Echostar Communications Corp. (DISH-36; Underperform)

The DirecTV Group (DTV-22; Peer Perform)

Entertainment: Market Overweight

News Corp. (NWS-22; Peer Perform)

Time Warner Inc. (TWX-20; Peer Perform)

Viacom (VIAB-39; Outperform)

Walt Disney Co. (DIS-33; Peer Perform)

Addendum

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