JAG
CAPITAL MANAGEMENT LLC

Chill on the Content Bubble

AUTHOR

Joseph Kinnison, CFA
Director of Equity Research

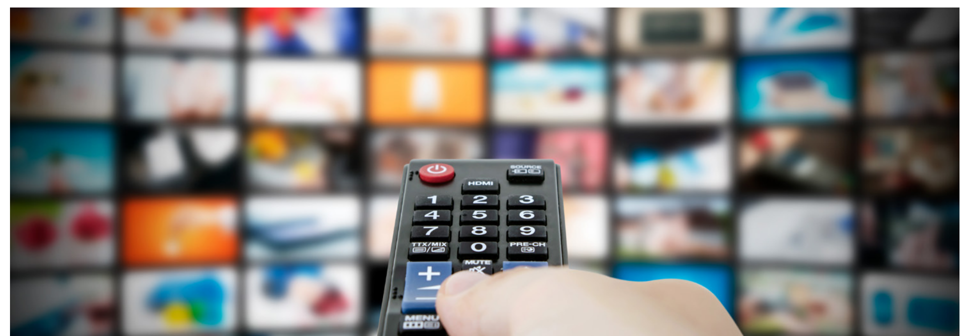
Joe coordinates JAG's equity research activities and serves as Senior Analyst on JAG's managed equity strategies.

>> Shift to Streaming is Ongoing
>> Media Outlets are Attempting to Compete on Content
>> Production and Editing in both Equipment and Software is Unappreciated

Out with the Old

Media consumption, especially in the form of television viewing, is in the midst of significant changes. Box office ticket sales were down 5% in 2017 (*The Numbers*), down for the fifth year in the last six years. NFL ratings are down high single digits for the second year in a row (*NY Post 1/18*). "Cord cutting," cancelling cable television service, exploded higher in 2017 with 22 million customers (*Variety 9/17*), 10% of all domestic cable customers quitting the service. The decline in traditional television viewership is particularly acute among 18-24 years olds. Nielsen data from Q2 2017 indicates a 17% year-over-year decrease in weekly big screen time by that cohort.

It's not hard to see where viewers' attention is going; it's streaming services. Binge watching conveys status, and "Netflix & Chill" has become cultural. Netflix has over 53 million US subscribers, and that sum is increasing at a 10% annual rate. Hulu has 17 million US subscribers, up 40% in the last year and a half according to *Variety*. Some suggest that the real driver behind Disney's acquisition of parts of Fox was that Disney gained control of Hulu in the deal.



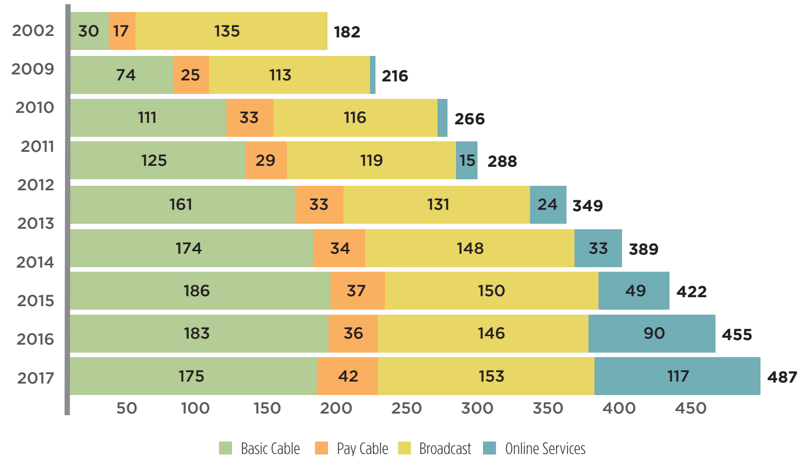
Media outlets are competing on the basis of content, and the rise in content delivered has essentially doubled in the last decade.

Nothing in this document is intended as an offer or a recommendation to purchase or sell securities.
Please see the last page for additional disclosures.

Doubling in Content

For years, a tug-of-war has occurred between access providers and content creators as to what has more leverage in reaching consumers. At times, large over-the-air and later dominant cable networks were able to collect and maintain viewers. During the recent migration from scheduled programming to streaming, however, the industry is wagering that not distribution but "Content is King." The number of scripted original series in production increased 7% last year to an all-time high of 487. If each series has a weekly offering, that would translate to three newly produced shows airing every waking hour of each week.

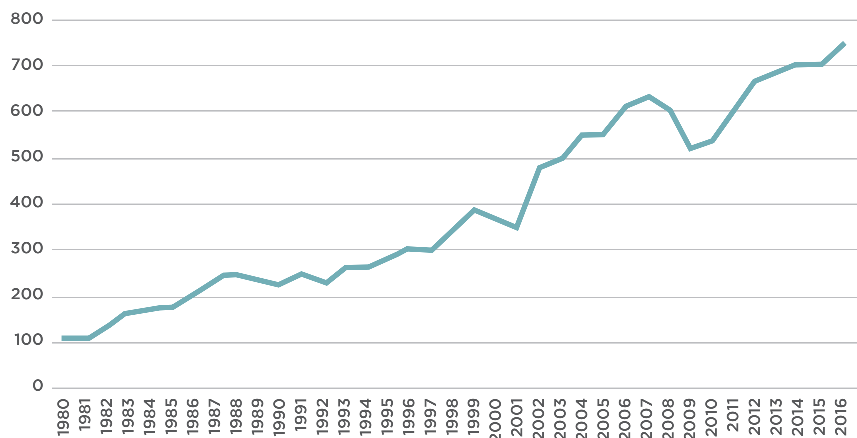
Estimated Number of Scripted Original Series*



*Estimated by FX Networks Research as of 1/2/18; culled from Nielson, Online Services, Futon Critic, Wikipedia, Epguides, et. al.
^Includes PBS
◊Includes Audience Network (DIRECTV)
Online Services = Amazon Prime, Crackle, Facebook Watch, Hulu, LouisCK.net, Netflix, Playstation, Seeso, Sundance Now, Vimeo, Yahoo, and YouTubeRed.
Excludes library, daytime dramas, one-episode specials, non-English language/English-dubbed, children's programs, and short-form content (<15 mins).

Full length motion picture trends align with scripted series data. The number of movies released in the US has doubled over the last decade and a half. The current pace would debut two new feature films every day of the year.

Number of Feature Films Released in US Cinemas, 1980-2016



Source: StephenFollows.com

Bubbles eventually pop, and this one will as well. Some of the financial conditions for that are in place, like a rising number and cost of movies and a falling number of ticket sales. However, we are reluctant to call a top. New content does appear to be working to drive viewers to streaming services and that looks to be generating value for those companies. Instead of picking peaks, our view is that the financial markets might be missing beneficiaries of currently soaring content production.

Factors of Production

Reports suggest that budgets for scripted series and films are rising at a faster rate than the amount of content created. The evidence for this is more anecdotal but average salaries for writers and producers is believed to have doubled over the last five years. Moreover, content production is less efficient as producers both use less qualified crews and compete for locations, actors, and editing resources. Content is being produced at a rate that appears to be greater than the ability for shows to be consumed (over 50 new content hours per day created compared to 3 hours per day of average viewing time), prices are rising, and quality is suffering. Those are the makings of a content bubble in our opinion.

From a local/regional perspective, content creation has outgrown Hollywood. Atlanta, Georgia, for example, led the nation in content production last year, and that would have moved local tax revenues higher. Relative to equipment, more production requires more cameras, more sound equipment, and more lighting standards. Three semi-trucks full of production equipment are now utilized on an average set per *Variety*.

In addition to light and sound equipment, film creation requires image and sound production software. Increasingly, film editing, cutting, and assembly along with video masks and sound enhancements are done on site. Real time is not the only driver, as the quantity of digital supplements are increasingly in demand. Driving this demand, audiences are seeing so much more content that expectations for production quality, video effects, and sound mixing are rising. One of the jokes in the "Deadpool" movie is that Marvel cannot make a film without a CGI (computer generated) character.

It's not only behind the screen products and services that are riding the content wave. On screen actors and actresses are utilizing and inspiring the use of increasing quantities of cosmetics. L'Oreal reports a 4% beauty industry growth rate, and that growth rate has accelerated each year for the last four years. Extending beyond products alone, demand for cosmetologists has been growing at a 10% rate since 2014 according to the Bureau of Labor Statistics. The content bubble has changed consumption of hair products, skin products, and make-up.

Conclusion

A shift in media consumption is well underway, and JAG believes that streaming services will continue to attract new customers. Media outlets are competing on the basis of content, and the rise in content delivered has essentially doubled in the last decade. To say nothing of people and locations, this content has requirements for equipment and software that the financial markets may be underestimating. JAG sees growth investment opportunities in those areas.

800.966.4596 | www.jagcapm.com

Nothing in this document is intended as an offer or a recommendation to purchase or sell securities. Please see the last page for additional disclosures.

ABOUT JAG

JAG Capital Management is an independent, 100% employee-owned registered investment advisor headquartered in St. Louis, Missouri. The firm provides portfolio management services for institutions, individuals, investment advisory firms and corporations. In addition to managing the JAG Large Cap Growth mutual fund, equity and fixed income separate accounts are also offered.

These comments were prepared by Joseph Kinnison, CFA, an analyst, of JAG Capital Management, LLC, an SEC registered investment advisor. The information herein was obtained from various sources believed to be reliable; however, we do not guarantee its accuracy or completeness. The information in this report is given as of the date indicated. We assume no obligation to update this information, or advise on further developments relating to securities discussed in this report. Opinions expressed are those of the advisor listed as of 2/15/18 and are subject to change without notice. Opinions of individual representatives may not be those of the Firm. Additional information is available upon request.

The information contained in this document is prepared for general circulation and is circulated for general information only. It does not address specific investment objectives, or the financial situation and the particular needs of any recipient. Investors should not attempt to make investment decisions solely based on the information contained in this communication as it does not offer enough information to make such decisions and may not be suitable for your personal financial circumstances. You should consult with your financial professional prior to making such decisions. For institutional investors: J.A. Glynn Investments, LLC, and JAG Capital Management, LLC, both have reasonable basis to believe that you are capable of evaluating investment risks independently, both in general and with regard to particular transactions or strategies. For institutions who disagree with this statement, please contact us immediately.

Market Index performance statistics are provided by Advent Axys via benchmark data from FT Interactive Data and are presented for the time frame noted. Individuals cannot invest directly in an index. PAST PERFORMANCE SHOULD NOT BE CONSIDERED INDICATIVE OF FUTURE PERFORMANCE. ANY INVESTMENT CONTAINS RISK INCLUDING THE RISK OF TOTAL LOSS.This document does not constitute an offer, or an invitation to make an offer, to buy or sell any securities discussed herein. J.A. Glynn & Co., JAG Capital Management, LLC, and its affiliates, directors, officers, employees, employee benefit programs and discretionary client accounts may have a position in any securities listed herein.

9841 Clayton Road | St. Louis, MO 63124
800.966.4596 **www.jagcapm.com**
Securities offered through JA Glynn Investments LLC, Member FINRA and SIPC