The Henry Fund
Henry B. Tippie College of Business
William Marietti [William-Marietti@uiowa.edu]

Video Streaming Service Industry

February 9, 2022

Communication Services

Industry Rating **Overweight**

Investment Thesis

We recommend an overweight rating for the video streaming industry due to continued growth of the "cord-cutting" phenomenon and the expansion of original content produced by service providers. As the number of cable subscriptions continues to fall each year, streaming services continue to see extensive growth. Due in part by lower costs and mobile accessibility, streaming services have cut into cable's market share significantly since 2015, reducing the number of people in the U.S with cable from 85% in 2015 to 71% in 2021[15]. We project the streaming industry to outpace cable in membership growth in the next 10 years.

Drivers of Thesis

- The cable TV market will continue to shrink 3% year over year into 2031 as people leave for streaming services.
- Increasing amounts of capital will be spent on quality original content to compete in the industry which will drive up viewership as people keep up with viral shows and movies.
- The eventual move into the gaming industry based on consumer trends and the ability to provide these services in a cost-effective manner.

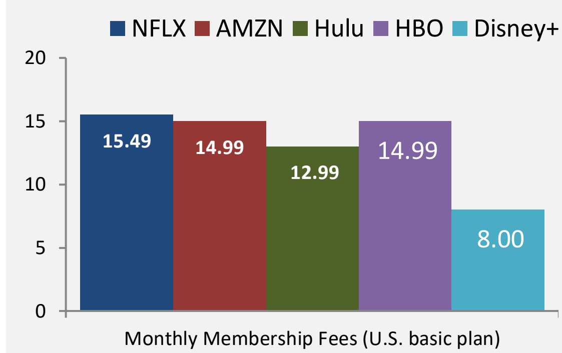
Risks to Thesis

- Price hikes may be necessary to continue to fund original content expenditures across the board, especially for cheaper services, deterring subscribers.
- Cable companies have the potential to join in on the streaming industry by offering their services through similar platforms and leverage their large networks to offer premium content, stealing market share.
- Potential market saturation may be occurring, as people who were previously on the fence about getting a streaming service have been pulled in during the pandemic rush, leaving slow adapters as the only untapped market.

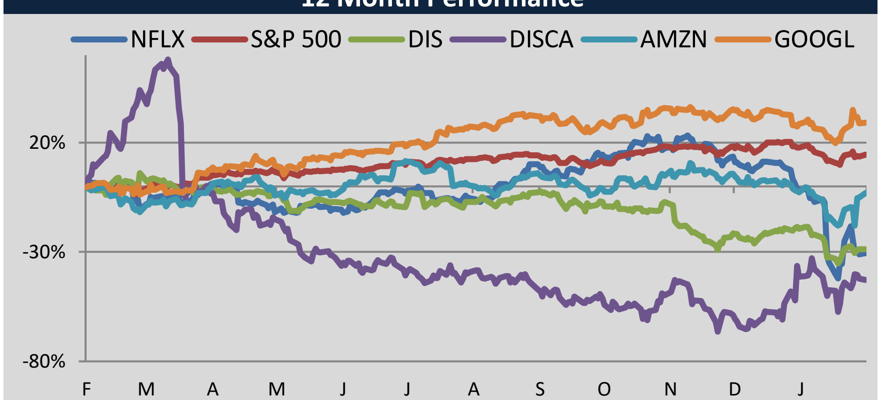
Industry Statistics

Key Players	Market Cap (B)
Alphabet	$1,838.4
Amazon	$1,607.3
Disney	$259.1
Netflix	$180.0
Discovery	$14.2
EV/Subscriber	**2021-Q3**
Alphabet	415,724.4
Amazon	8,580.3
Disney	2,063.0
Netflix	1,315.0
Discovery	1,314.9
Return on Equity	**2021-Q3**
Alphabet	30.8%
Amazon	25.8%
Disney	1.3%
Netflix	39.3%
Discovery	9.3%
% of U.S. with a Service	**78%**

Source: Statista



12 Month Performance



Industry Description

Video streaming has taken the world by storm over the past five years. By taking advantage of faster internet speeds, companies in the entertainment have gradually transitioned to streaming in one way or another. Through subscription or ad-based models, industry participants allow users to stream movies and television from any mobile device with an internet connection. Companies acquire content either through licensing deals or in-house film studios. The move to original content has become increasingly popular since the pandemic.

INDUSTRY DESCRIPTION

The video streaming industry provides a variety of on-demand content to users across the globe. Through paid subscriptions or ad-based viewing, this industry allows customers to watch movies, TV, and live events from their television or mobile device. Industry leaders often provide a tier-based subscription system where users can go from a free (ad-based) account to a premium account with a monthly fee.

The onset of the COVID-19 pandemic marked a turning point in the industry as demand for these services rose as well as competition. Subscriptions grew 32% YoY in 2020 as the world was confined to their homes for entertainment[2]. As competition grew, many of the pre-pandemic ways of business were changed. Media companies like Disney who had previously licensed their content to streaming services were now starting their subscription-based services, effectively cutting off access to content for their former business partners. This has pressured the likes of Netflix to invest heavily in original content to compete.

vMVPD

Virtual multichannel video programming distributor, or vMVPD, accounts for 60% of the entire streaming industry's revenue[7]. This segment gives users access to live TV including news and sports. Thanks to the "cord-cutting" craze, this segment has seen significant growth over the last five years. Unlike traditional cable which offers channels in bundles, streaming services allow users to subscribe to the channels of their choice, boosting overall satisfaction. Users are also able to access content on their mobile devices. Major players in this segment Hulu Live-TV, YouTube TV, PlutoTV, Sling TV, and FuboTV. Most of these platforms are subsidiaries of larger communications giants like Google and Disney.

Despite accounting for a smaller percentage of total subscribers in the industry, linear/live streaming generates significant amounts of revenue due to higher associated fees, costing around $64.99 a month on average[3]. This gives streaming services with a foot in this segment a large competitive advantage.

I project the popularity of cable TV to continue to decline as younger generations switch to more cost-effective and versatile entertainment options like live streaming. The rise in users will make this segment even larger, eating into the cable industry's roughly 46 million subscriber population[4]. We project this segment to account for around 70-75% of the total industry revenue by 2031.

Service	Monthy Cost	# of Channels	Subscribers (thousands)
Hulu+LiveTV	$69.99	75+	4,000
YouTube TV	$64.99	85+	4,000
Sling TV	$50.00	49	2,486
Fubo TV	$64.99	120	1,130

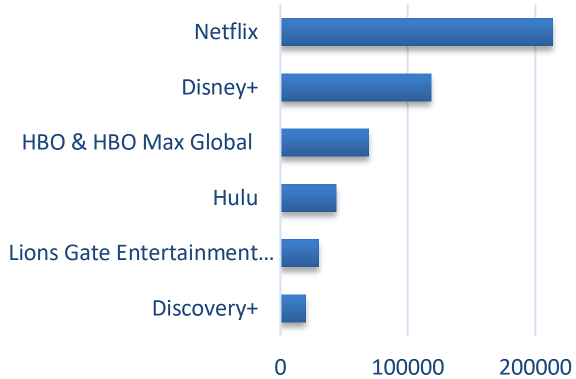
Source: Company 10K's

SVOD

Subscription-based Video on Demand, or SVOD, represents the largest number of consumers in the streaming industry. This segment is made up of paid and ad-based subscriptions that enable the user to watch an assortment of movies and television on demand. Pioneered by communications giant Netflix, SVOD services are now offered by many companies in the entertainment industry. As previously mentioned, many companies that used to license content to SVOD's now operate these services themselves, making competition intense. The battle for subscribers has become fiercer, resulting in significant investments into original content.

The average U.S. household subscribes to 3.6 streaming services[5]. This number is likely to decrease over time as subscription fees continue to trend upwards. We project that by 2031 the average household will subscribe to around 2.5 streaming services and the industry will shrink to a handful of service providers due to rising prices and industry consolidation, like the modern cable industry. We also project monthly subscription fees to rise globally as the emphasis on in-house content rises. The average fee was around $9 a month in the U.S. in 2020[6]. We project this to rise to around $12-$15 a month for a base membership by 2031, or 5.24% CAGR, in order to keep up with demand for higher quality content. Companies will also likely have to pay premiums for the rights to content they don't produce. As more services pop up, bidding wars for the rights to certain content will ensue, driving up costs overall.

Global SVOD Services by Number of Households (thousands) Q3 2021



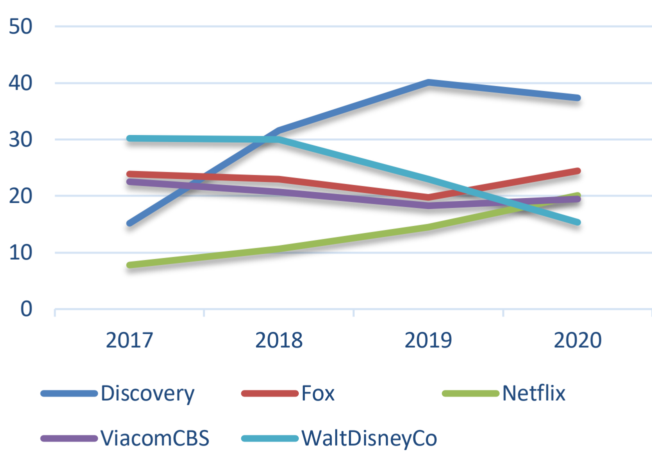
Source: Company 10K's

Cost Structure Analysis

Companies in this industry tend to hover around the same area when it comes to profitability with EBITDA margins around 15%-25% in 2020. As expected, the largest cost segments include those associated with providing content to subscribers. Costs have risen in recent years as firms increase overall spending on content to compete.

Another major cost in this industry is employee wages. In order to attract highly skilled software engineers/ data analysts, companies have raised compensation, with the average salary in this industry over $170,000[1].

EBITDA Margins (%)

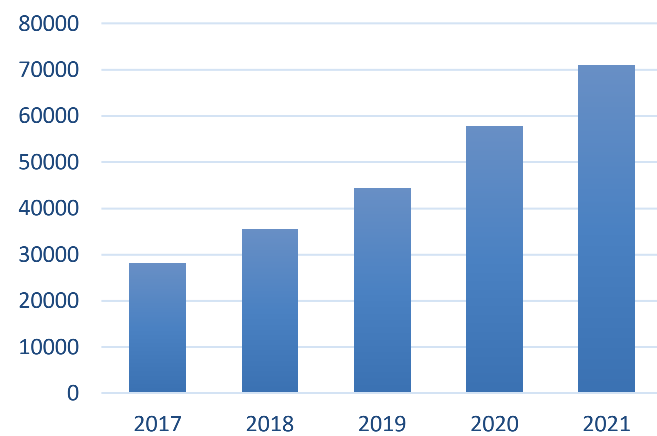


Source: Bloomberg

Industry Revenue

Revenue in the video streaming industry has risen 24.8% from 2015-2020, making it one of the fastest-growing industries globally[1]. We project revenue to grow by 30% over the next 10 years driven by increasing subscribers and costs. The COVID-19 pandemic saw an increase in revenue across the industry as spending on at-home entertainment increased. Aggressive spending on content has resulted in price hikes for most subscription services. As a result, margins have remained relatively consistent over the past few years. We expect margins to slowly increase over the next 10 years. It has become clear at this point that the main way to attract subscribers is to produce top-quality content. This means spending significant amounts of capital on actors and studios. Coupled with increased spending will be an influx of viewers, leaving the industries margins relatively consistent.

SVOD Industry Revenue (millions)

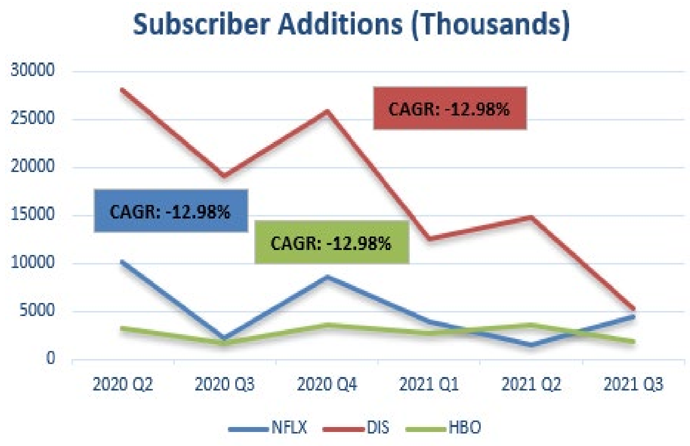


Source: Statista

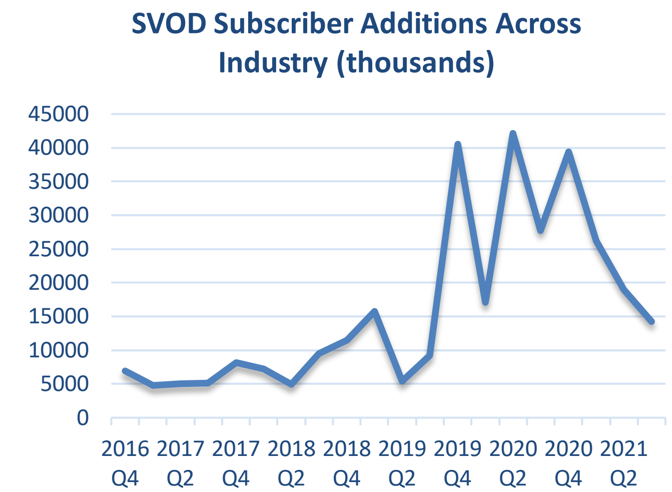
RECENT DEVELOPMENTS

COVID-19 Impact

Unlike many U.S. industries that were negatively impacted by COVID-19, the streaming industry managed to do just the opposite. The industry saw an influx of subscribers during the pandemic, largely driven by the closing of movie theaters and other entertainment options. As mentioned before, total industry subscriptions rose 32% YoY in 2020[2]. The graph below shows Netflix's subscriber additions, which are the number of new people who subscribed in that quarter.



Source: Bloomberg



Source: Bloomberg

WarnerMedia Spinoff

WarnerMedia, a subsidiary of AT&T, has been spun off and merged with Discovery. HBO Max, which is a subsidiary of WarnerMedia, has been proposed to be combined with Discovery+, offering both on the same platform. Discovery CEO JB Perrette commented on the topic by saying the plan will likely unfold in two phases, the first being bundling of both services and the second being combining them onto one platform[9]. The potential synergies realized from this deal could position Discovery+ amongst the top players in the industry. With the overall industry push for better content, the libraries of both services could attract new viewers and disrupt the current landscape of streaming.

Slowing Subscriber Growth

Subscriber additions across the industry have continued to lag 2020 highs. Recent earnings releases by Netflix have shown lower than anticipated subscription numbers. We believe the pandemic may have front-loaded new subscriptions onto the past two years, leaving less room for growth in the near future. Companies will need to diversify their content and create bigger hits in order to attract people who haven't already been sold on the idea of getting a streaming service. The chart below shows subscriber additions across the largest companies in the SVOD industry.

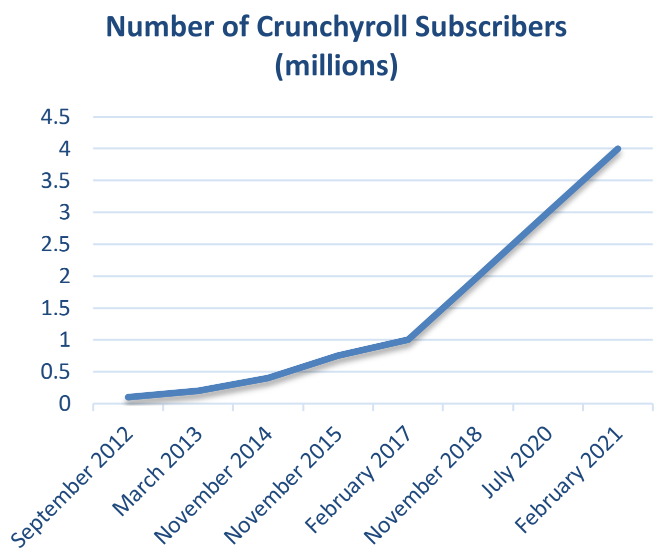
INDUSTRY TRENDS

Original Content

As new firms enter the market, the need for high-quality original programming increases. Firms like Disney who once licensed their content to Netflix now operate in competition. This has forced Netflix and others to become self-reliant and create their own entertainment. This trend hasn't really affected the number of studios however, rather it's given more opportunities to "indie" film producers. The industry is now starting to realize that exclusive content is the best way to win new subscribers, whether these subscribers stick around will be discussed later. Shows like Disney's *The Mandalorian* and AppleTV's *Ted Lasso* have attracted new users to the platform in search of the best bang for their buck when it comes to content. Social media has also played a huge role in this trend too. People on Twitter and other platforms share their opinions on these shows, making others interested and the show going viral. Such as the case of Netflix's *SquidGame* which became a global sensation after being praised on social media. Original content provides major value to subscribers who might be choosing between services. A service that consistently produces award-winning, original content is likely to outperform. We project massive amounts of future spending on this category of entertainment in the near future.

International Content

Netflix's *SquidGame* became the most streamed television show on Netflix of all time in a matter of 4 weeks[11]. Originally produced for the Korean market, *SquidGame* became a global sensation, pushing aside previous beliefs that foreign content wouldn't do well in American markets. This notion was soon dismissed as the show took over the globe like wildfire. Another example of this trend is the increasing popularity of anime, a Japanese style of cartoon targeted towards young adults. These shows have made their way onto almost every streaming platform. Crunchyroll, owned by Funimation, is a streaming service dedicated to these shows and has grown in popularity significantly over the years. The graph below shows the number of subscribers for Crunchyroll since 2012. Platforms like Netflix have increased the amount of anime they offer significantly over the years, as the shows have seen great success in American markets.

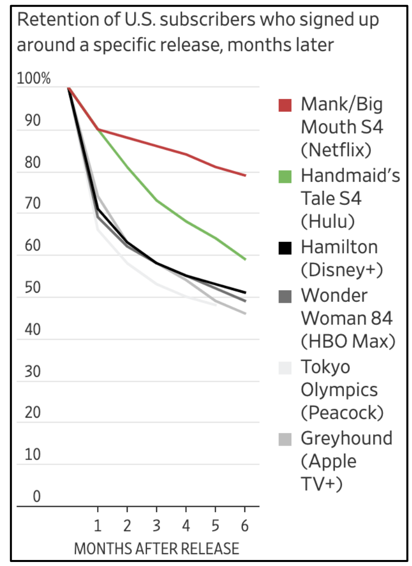


Source: Statista

The ability to air international content overseas is a huge benefit for streaming services as it allows them to maximize viewership. Around 45% of Netflix's content is considered international, ranking it the highest amongst its peers[23].

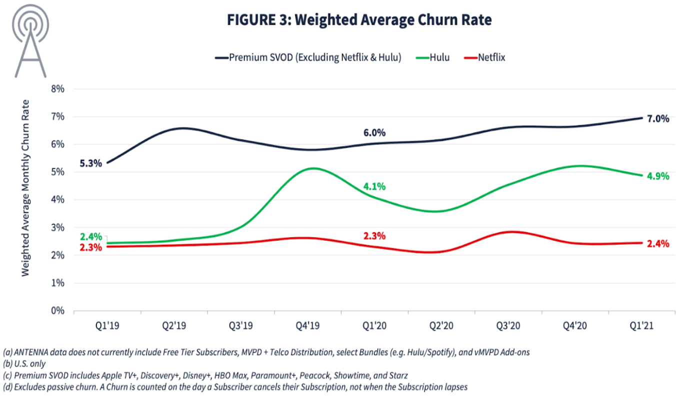
Subscriber Retention Rates

New subscriptions tend to spike around anticipated releases, slowly trickling off months after the release. Some platforms see as much as 50% of their new sign-ups leave after 6 months of a major release[5]. Losing subscribers is not new for any of these platforms. Almost all lose some portion of subscribers every month, these are made up for though with new subscribers to have a net overall increase. This phenomenon however sees users leaving at much faster rates than previously seen. Firms have been trying to combat this by consistently producing hits to keep people on board. The graph below shows the retention rates of subscribers after major releases.



Source: Wallstreet Journal

While this may strike an immediate concern for most, the net benefit companies realize make up for lost subscribers. Although many people leave, the net level of users is significantly higher than before the release. The population who leaves after these releases has created a new segment of customers. These individuals will likely continue this pattern of behavior in the short term, but we project this group to fully commit to a streaming service in the long term as content continues to be released on a more consistent basis. The graph below shows the average churn rates for the industry.



Source: Antenna

MARKETS AND COMPETITION

Barriers to Entry

The video streaming industry has a large barrier to entry for most looking to join. Initial capital requirements including the latest tech and software make entry difficult. This is coupled with a highly skilled workforce required to maintain and innovate servers as well as perform viewership analytics. Along with physical capital requirements, a large and diverse library of digital content is necessary to stand out amongst the competition. This would require licensing from studios and possibly investing in original content. Companies that already have the technology to stream content as well as obtain media rights have a better chance of entering this industry than others. For example, a firm like Disney which already owns a large amount of content had an easy time entering the industry. Their portfolio of content is a competitive advantage, and current industry participants need to be wary of others who could potentially enter too.

Threat of Substitutes

The threat of substitutes in this industry is extremely high and will only continue to increase, especially as platform loyalty begins to fade with many alternatives. As mentioned before, the average U.S. household subscribes to around 3 streaming services. This creates major competition between players in the industry as they fight to get a spot on each household's roster. Firms must continue to license popular content as well as produce their own hit pieces in order to keep up with the competition. With new services popping up all the time, firms must continually prove their worth to consumers. This usually comes in the form of acquiring the rights to blockbuster hits and original content. With monthly fees uniform throughout the industry, substitution is always a concern for players in this industry.

Peer Comparisons

The video streaming industry is dominated by entertainment and communications firms. The table below outlines the parent companies of the major streaming services. At the time of this report, the merger of Discovery and AT&T's Warner Media is still pending. The acquisition would make HBO and Crunchyroll a part of Discovery+.

Parent	Streaming Service
ViacomCBS	Paramount+, BET+, PlutoTV
Discovery Communications	Discovery+ (Acquisition of HBO pending)
Lions Gate Entertainment	STARZ
AT&T	HBO & HBO Max, Crunchyroll
Disney	Disney+, Hulu, ESPN+
Netflix	Netflix
Alphabet	YouTube Premium, YouTubeTV
Amazon	Amazon Prime

ViacomCBS

ViacomCBS is a media and entertainment conglomerate that operates television networks, film studios, and streaming services. Its streaming portfolio includes Paramount+, BET+, and PlutoTV. Offering some of the cheaper subscriptions in the industry, ViacomCBS offers bundling packages for a discount on their services. In total, ViacomCBS has around 4% total market share of the streaming industry[13].

ViacomCBS	
Revenue Per Subscriber (per month)	70.47
EBITDA Margin (%)	19.47%
ROIC (%)	10.56%
P/E FY1	14.20
Debt/Total Assets	33.49%
EV/EBITDA	10.1x

Discovery Communications

Discovery Communications is a media and TV conglomerate with a broad entertainment portfolio. Their streaming service, Discovery+, has around 5.2 million subscribers[16]. Discovery is currently in the process of acquiring AT&T's Warner Media, thus bringing HBO & HBO Max into their portfolio. Management has stated that the

Discovery+ and HBO platform will initially be available as a bundle, eventually moving onto the same platform. The acquisition will significantly disrupt the industry, as HBO is the third-largest streaming service by subscribers.

Warner Bros Discovery	
Revenue Per Subscriber (per month)	9.23
EBITDA Margin (%)	37.39%
ROIC (%)	6.06%
P/E FY1	10.66
Debt/Total Assets	45.44%
EV/EBITDA	11.7x

Disney

The Walt Disney Company is a film, TV, and entertainment giant. Disney owns one of the largest libraries of original content that is some of the most recognized as well. They operate through multiple segments like theme parks, consumer products, and media networks. Their portfolio of streaming services rank at the top in terms of subscribers. Their largest platforms include Disney+ and Hulu. They also have a presence in vMVPD streaming with Hulu+ Live TV. Disney and Netflix both combine for over half of the entire industries market share.

Disney	
Revenue Per Subscriber (per month)	23.69
EBITDA Margin (%)	13.30%
ROIC (%)	2.20%
P/E FY1	35.56
Debt/Total Assets	28.64%
EV/EBITDA	16.9x

Amazon

Amazon.com, Inc. is an online retailer that provides a multitude of services, including cloud computing, streaming, and distribution. Their flagship service, Amazon Prime, gives users access to same-day shipping, streaming services, and grocery services. Each Prime member gets access to Amazon Prime Video which is a video streaming service that gives users access to TV and movies on-demand. It is available worldwide except for a select group of countries, China included. Amazon recently acquired Metro-Goldwyn-Mayer, expanding their studio and entertainment library. Amazon also reached a deal with Universal Pictures, adding their content to Amazon's library. Prime Video has roughly 16% market share in the streaming industry. Amazon has an advantage in the industry by offering multiple benefits for its subscribers other than just entertainment, like expedited shipping and access to Amazon's Kindle library.

Amazon	
Revenue Per Subscriber (per month)	5.85
EBITDA Margin (%)	13.77%
ROIC (%)	9.24%
P/E FY1	42.66
Debt/Total Assets	31.46%
EV/EBITDA	18.7x

Netflix

Netflix Inc. is an internet subscription service that allows users to stream TV and movies directly to their mobile devices or television. One of the original members of the video streaming industry, Netflix is the most subscribed platform in the entire industry. Netflix has expanded its presence into film studios, gaming, and film distribution. Available practically worldwide, has cemented itself into the minds of consumers who view it as "The" streaming service.

Netflix	
Revenue Per Subscriber (per month)	10.23
EBITDA Margin (%)	22.87%
ROIC (%)	17.27%
P/E FY1	33.40
Debt/Total Assets	40.63%
EV/EBITDA	20.9x

Lions Gate Entertainment

Lions Gate Entertainment owns and operates several entertainment companies in the U.S. and Canada. Their flagship Lionsgate Films is a film production and distribution studio. Their streaming service STARZ has around 30 million subscribers globally making it one of the smaller players in the industry[16]. STARZ has a smaller library of content than most streaming services, however it does come with a plethora of original content from its history as a premium cable network. Lions Gate has also ventured into gaming by licensing out its content to video game studios.

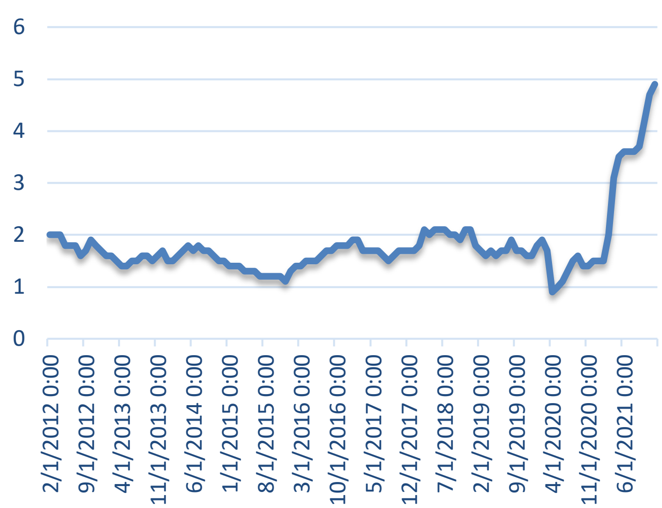
Lions Gate Entertainment	
Revenue Per Subscriber (per month)	10.99
EBITDA Margin (%)	12.36%
ROIC (%)	1.77%
P/E FY1	15.61
Debt/Total Assets	42.75%
EV/EBITDA	19.1x

ECONOMIC OUTLOOK

Consumer Spending

Consumer spending, also known as personal consumption expenditures (PCE) tracks the amount of money U.S. citizens spend on goods and services. PCE is very important to the economy as it is a direct reflection of how much companies will be earning during a given time period. It is especially relevant to the streaming industry, as elevated consumption could directly tie into the number of subscribers earned. As seen from the graph below, PCE has risen significantly since 2020. This also happens to coincide with the growth of the streaming industry as a whole. We project consumption to continue to rise over the next 2 quarters but start to tail off thereafter. We believe that when spending peaks as high as it is now, there will be some pullback in spending going forward. People will be less likely to spend on discretionary items, especially products or services they have never used before.

US Personal Consumption Expenditures (%YoY)

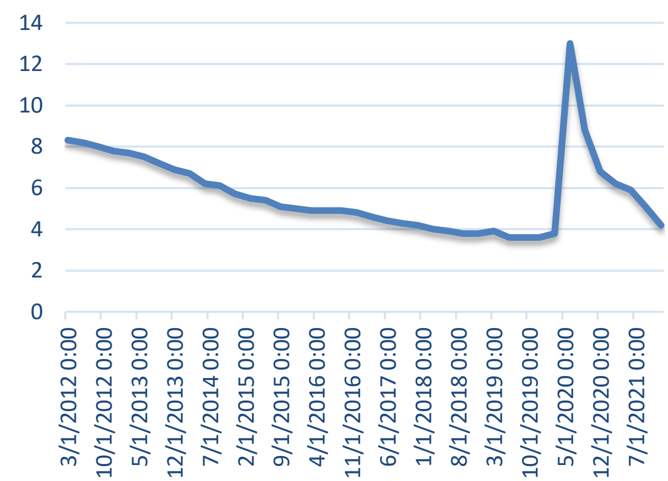


Source: Bloomberg

Unemployment

The unemployment rate is the percent of the population who is not working. Unemployment is a lagging indicator, meaning it is usually affected after an economic downturn or upswing. The COVID-19 pandemic raised unemployment levels to spectacular highs. Since then, unemployment has been going back down to normal levels. Unemployment has a huge impact on the streaming industry for obvious reasons. If people aren't employed they likely aren't making purchases on things like entertainment. It should be noted however that the height of the pandemic saw a major increase in subscriptions, around the same time unemployment hit highs. We believe that the two are not correlated, and that unemployed people are not driving the demand for subscriptions. We suspect unemployment will continue to fall as government stimulus ends and the effects of the pandemic continue to subside. We target unemployment to be around 4% over the next 6 months.

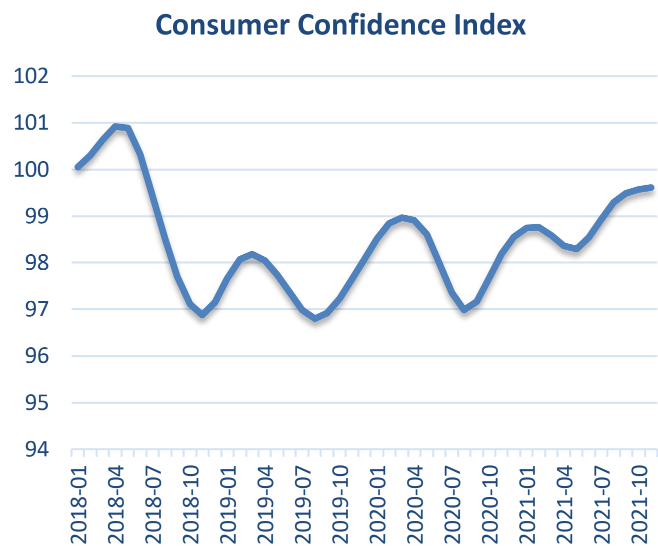
US Unemployment %



Source: Bloomberg

Consumer Confidence Index

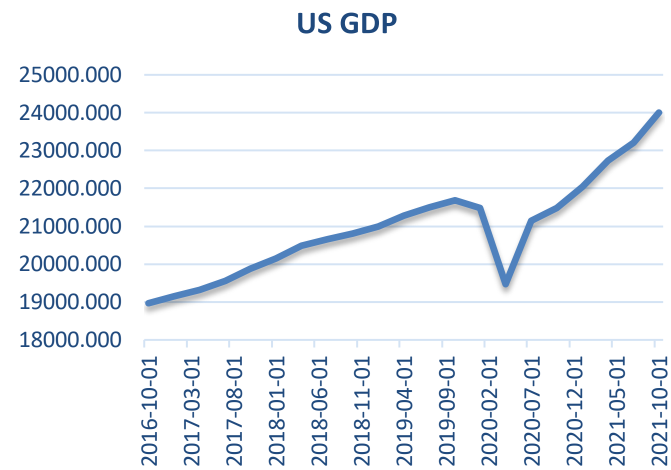
The consumer confidence index (CCI) measures the amount of pessimism or optimism in the economy. A CCI number below 100 means that there is general pessimism in the economy. People are less likely to make big purchases when the CCI is low. COVID-19 played a huge role in lowering the CCI in 2019, and since then it has been slow to recover. Although getting a streaming service isn't necessarily a "large purchase", consumer confidence still influences spending and could deter more vulnerable people from buying one. Spending during the pandemic increased, despite low consumer confidence. We attribute this to people being stuck at home with nothing to do and making purchases online. Moving forward, CCI will likely play a larger role in big purchases, especially with the threat of rising borrowing costs. We project CCI to remain at current levels for the next 2 years as the uncertainty of the pandemic remains and the realities around inflation continue to scare the public.



Source: OECD

GDP

GDP measures the market value of all goods produced in a country. It acts as a measure of an economy's overall health. U.S. GDP hit lows not seen in a decade during the height of the COVID-19 pandemic. It was able to rebound significantly in mid-2020 and has since returned to levels slightly elevated from pre-pandemic. GDP is a broad indication of how healthy an economy is. Periods of low GDP often correspond to inefficient productivity in the economy. As a result, many industries, including the streaming industry, are tied to it. We project GDP to grow around 2.5% over the next 6 months and 5% over the next 2 years.

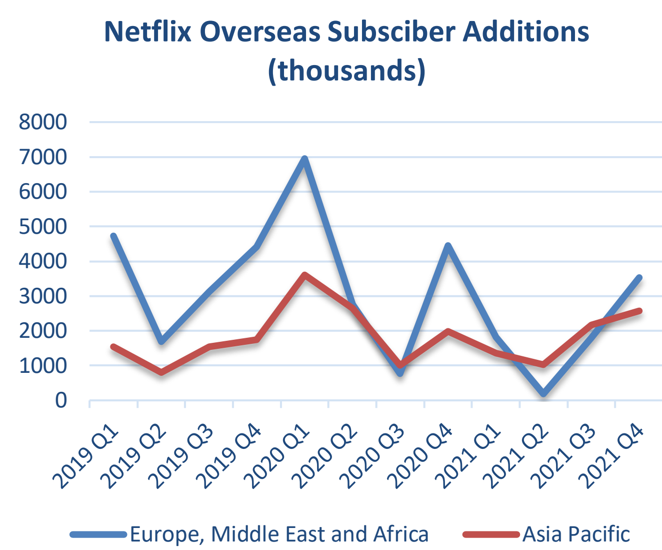


Source: FRED Database

CATALYSTS FOR GROWTH

Overseas Markets

The growth of new subscriptions in North America has started to flatten out for some of the largest in the industry. Like North America, overseas the industry saw a massive influx of subscribers during the pandemic, which has since started to wind down. By catering content across markets, the industry could see further additions globally. The graph below shows the overseas segments of Netflix and how many subscribers have been added per quarter. Since Q2 of 2021, new additions have been on the rise, showcasing the potential of the global market.



Source: Bloomberg

Gaming

The conversation around streaming and gaming has been around for some time now. Many console companies like PlayStation and Xbox offer a streaming subscription for playing games. These services are exclusive to the specific console meaning there are few options for universal gaming services. Platforms like Netflix already offer users the ability to play games on their accounts. These games however are owned by Netflix and are usually based on characters from their original programming. We believe the industry would benefit greatly from the addition of a gaming platform to their services. The appeal to streaming video games is that it doesn't require someone to own a console. In the same way cloud computing works, users can play games virtually through a server on the other side of the county. Many players in the industry already have the technological capabilities to support a feature like this. It would spark significant competition from more traditional gaming systems that require you to own the hardware your game runs on.

Faster Internet

Increased internet speeds brought on by the rollout of 5G will further facilitate mobile viewership. In 2021, the average internet speed in the US increased by around 20%[25]. Bringing better connection speeds overseas will help increase the popularity of the platforms as well. That is one of the main problems with a service that's completely dependent on the internet to run. As the world becomes increasingly digitized and connection speeds can support streaming, the industry will see massive growth. As previously mentioned, the realization that foreign entertainment can prove to be a success globally will help launch this industry into every home across the globe, like how cable TV took over after access to the network became feasible in more remote areas.

Conclusion

We believe that the video streaming industry should be held overweight. The industry is beginning to replace cable subscriptions as a means of entertainment, and we believe this trend will only continue. Companies poised to succeed are ones with a large library of original content created through partnerships with studios or through licensing. We believe that companies with large content budgets will be better off due to the increasing importance of original content.

KEYS TO MONITOR

Industry Positives

- Increased spending on original content which creates more incentives to become a subscriber
- Cable cutting trend allows users to save money and select shows they want to watch, slowly eating into cables profits
- Popularity of foreign shows in U.S. market allow for larger amounts of content and more diverse library
- Faster than before internet speeds increase visual quality of content and allow for a more mobile experience

Industry Negatives

- Highly competitive market with plenty of options for consumers
- Low barriers to entry for companies already established in the digital media industry
- Subscriber retention rates drop around big releases, with some users only getting subscriptions to watch the new content

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12. Statista (crunchyroll users)
13. Statista (USA SVOD Usage)
14. OECD
15. Statista (Pay TV Penetration Rate)
16. Bloomberg
17. Netflix 10k
18. Alphabet 10k
19. Discovery Communications 10k
20.The Walt Disney Company 10k
21. AT&T 10k

22. Factset
23. WhatsOnNetflix
24. Antenna
25. Highspeedinternet

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