

NETFLIX

ENTERTAINMENT SERVICES

CATARINA BORGES OLIVEIRA, MARIA INÊS RIBEIRO

COMPANY REPORT

4 JANUARY 2019

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Netflix is the New Black

Investors can continue to (buy) Netflix and Chill

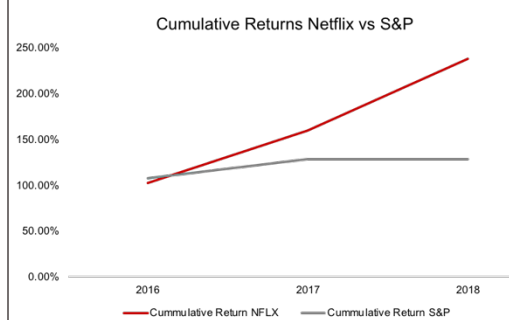
- Netflix's stellar growth is expected to continue in the following years, mainly fuelled by heavy investments in original content and increasing growth in international segments. By 2028, revenues are expected to more than triple relatively to 2018 (an increase of 241.1%).
- As of 2017, the domestic streaming segment made up the majority of total revenues. As the international segment gains importance, we can expect it to represent more than half of total revenues from 2019 onwards, with a share of 66.1% in 2028.
- The company is expected to invest a total of \$11 Billion in streaming content in 2018. The focus will be on original productions, as a way of differentiating itself from competition and attracting more subscribers. This trend is expected to continue in the future. We anticipate Netflix to invest around \$21.05 billion in content in 2028.
- Nonetheless, competition in the streaming world has been heating up, which may hinder Netflix's ability to fulfil growth expectations and further subsidize its content strategy.
- On the other hand, the company is considering introducing a new pricing tier that will most likely improve its growth potential in emerging markets and enhance international revenues.
- Based on a discounted cash flow valuation, with several scenarios considered, Netflix's price target for the FY19 corresponds to \$361.27, meaning it is trading at a discount of 22.71%. This leads to a final **BUY** recommendation.

Company description

Founded in 1997, Netflix is the world's leading Internet entertainment services network. Replacing the linear TV experience, its service allows subscribers to watch entertainment for a flat monthly fee, while being commercial-free. The company operates in over 190 countries and it currently has more than 137 million members worldwide.

Recommendation:	BUY
Price Target FY19:	\$361.27
Price (as of 4-Dec-18)	\$279.22
Reuters: NFLX.OQ, Bloomberg: NFLX US	
52-week range (\$)	178.38-423.21
Market Cap (\$m)	123 621
Outstanding Shares (m)	436.08

Source: Bloomberg



Source: Company Data; Yahoo Finance

(Values in millions)	2017	2018E	2019F
Revenues	11693	15837	18333
Revenue Growth	32%	35%	16%
Operating Income	838.68	1422.69	1594.96
Operating Margin	7%	9%	9%
NOPLAT	816.62	1330.4	1263.3
Paid Memberships	110.64	138.45	158.83
ROIC	18.2%	17.8%	10.6%
EPS	1.25	2.39	2.02

Source: Company Data and Valuation Forecasts

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY CATARINA BORGES OLIVEIRA AND MARIA INÊS RIBEIRO, MASTER IN FINANCE STUDENTS OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL.
(PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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Executive summary

The entertainment and media industry is undergoing a rapid transformation, fuelled by the growth of digital segments. As change takes place, the traditional TV experience is progressively being replaced by Streaming Video-On-Demand (SVOD) services. Consumers value the convenience and flexibility offered by digital video platforms, especially if it means having the opportunity to access high-quality content at all times.

With more than 137 million subscribers worldwide, Netflix is the leading player in the streaming market. The company has been experiencing outstanding growth for the past few years, albeit at a decreasing rate. Since 2015, paid streaming memberships have been growing at an average of 6% per quarter. With impressive returns in the past years, Netflix has consistently outperformed the stock market.

Netflix's strategy consists of investing heavily in content, especially in original programming. The company is expected to invest a total of 11 Billion dollars in content in 2018. This gives Netflix a competitive advantage over its competitors, as the company is building an unparalleled catalogue of original titles. Nonetheless, the streaming video landscape is becoming increasingly competitive, with new entertainment alternatives surfacing every year.

So far, the US has represented the majority of Netflix's revenues; however, the company's potential lies in the growth of international segments. With the increasing focus on original content, including locally-produced content, the company is expected to increase its revenues from \$15.8 Billion in 2018 to \$54.0 Billion in 2028.

As the company plans to continue producing content rather than licensing it, streaming content costs are expected to increase, as well as its Marketing budget. Given this, Return on Invested Capital will remain relatively low in the short-term (between 10% and 19% until 2020). However, as Netflix grows its subscriber base, its returns are expected to increase significantly in upcoming years. The company is expected to turn cash flow positive in 2021, when Return on Invested Capital reaches 21.97% and operating margin is approximately 19.22%.

Based on a Discounted Cash Flow valuation, this gives us a base case target price of \$401.78 for the Financial Year 2019. Incorporating a bear case which assumes Netflix will lose some of its economic moat to competition, and a bull case which assumes Netflix will increase its penetration in emerging markets if it introduces a new price-tier, Netflix's expected target price corresponds to \$361.27. This represents a final **BUY** recommendation.

Digital Video Revenues Worldwide

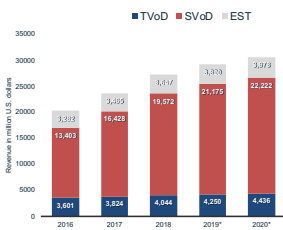


Figure 1: Growth of SVOD Revenues
Source: Statista, 2018a

Netflix Annual Revenue (2002-2017)

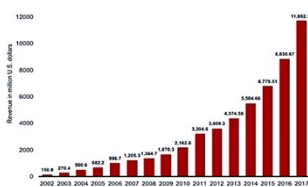


Figure 2: Netflix Annual Revenue (2002-2017)
Source: Statista, 2018a

Total Revenue Forecast



Figure 3: Forecasted Total Revenues

Free Cash Flow Forecast

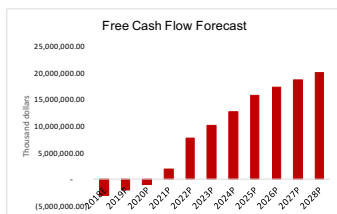


Figure 4: Forecasted FCF

Company overview

Bussiness Model



Figure 5: Countries where Netflix is available (in red)
Source: Netflix Media Center, 2018

Netflix is the world’s leading Internet entertainment services network. It operates in over 190 countries offering more than 140 million hours of TV entertainment per day on nearly any internet-connected screen. Replacing the linear TV experience, the service allows subscribers to play, pause and resume watching while being commercial-free. For a flat no-commitment monthly fee, members can enjoy unlimited viewing of TV series, movies, feature films and documentaries, including originals, anytime and anywhere (Netflix Website, 2018a).

Company description

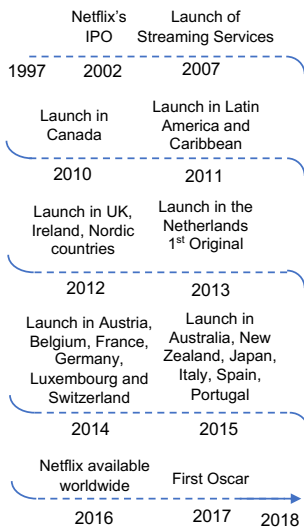


Figure 6: Netflix's Path

Netflix started in 1997, in the US, as a DVD-rental-by-mail company with a pay-per-rent model founded by Reed Hastings and Marc Randolph. In 2002 the company becomes public and then in 2007, the company headquartered in Los Gatos, California, introduces streaming of television shows and movies. In 2010, it starts internationalizing, launching services in Canada, and continues expanding in the following years. (Netflix Media Center, 2018). Currently, the Internet entertainment network still offers its DVD rental service in the US and is, as of 2016, a global provider of streaming services.

Pricing options include different tiers so that the customer can select the plan that best fits their needs and the agreements (memberships) kept with customers deliver recurring revenues to the business (Netflix Official Website, 2018b).

Netflix’s main growth/value driver is membership growth – the ability to continue to attract consumers and retain existing ones, making customer base grow, both in the U.S. and in International markets, especially in recent ones.

Products

Netflix’s products include the streaming services provided to both Domestic and International segments and DVD rentals by mail, available only in the United States. Streaming content includes exclusive and non-exclusive licensing agreements for subscription video-on-demand (SVOD) rights from multiple suppliers and original programming, since 2013. Content is more focused on TV shows and movies, including a variety of genres, including kids’ cartoons, and languages. Netflix originals include both content that is exclusive to the company but not produced by it, in which licensing may be agreed before the content is successfully produced; and self-produced originals, which are produced in-house by Netflix and owned by the company.

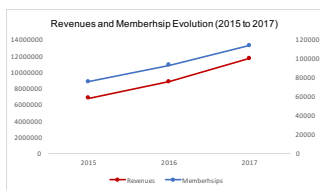


Figure 7: Revenue and Membership Evolution (2015 to 2017)

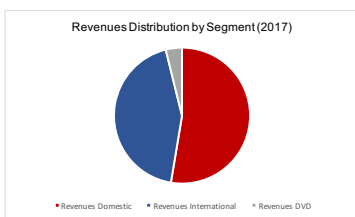


Figure 8: Revenue by Segment (in 2017)
Source: company data

Licensing deals are generally time-based and although the company tries for multi-year exclusive rights this is not always the case. Suppliers include movie studios, TV networks, distributors and sometimes films and TV shows producers. Differences occur between countries in content availability, but Netflix is working to increasingly get licensing deals on a global basis (Netflix Official Website, 2018a). Non-original programmes include deals with BBC (“Sherlock”), Warner Bros. (“Friends”), Twenty First Century Fox (“New Girl”) and ABC (“Modern Family”) (Oaks, 2017).

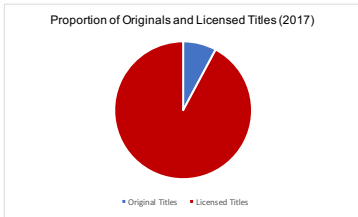


Figure 9: Proportion of Originals and Licensed Titles in 2017
Source: Epstein, 2016

The entertainment network began the inclusion of original content in 2013 with the series “House of Cards” (Netflix Media Center, 2018) and it was a success. Nominated for 53 Emmy awards so far, the series was awarded 7 times.

Netflix is increasing content spend and this increase is currently more targeted at owned original productions given that they offer more control over content, less reliance on outside studios, and the ability to strengthen brand value (Netflix Letter to shareholders Q3, 2018). Spending on originals is thus rapidly growing in proportion of total spending (Netflix Official Website, 2018a); however, in 2017, licensed programmes still represented more than 90% of the company’s content library (Epstein, 2016).

Company Growth Evolution

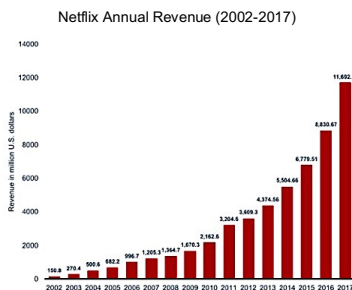


Figure 10: Netflix Annual Revenue (2002-2017)
Source: Statista, 2018a

The journey of Netflix since it was founded has been of continuous expansion and growth. Since 2002, when the company issued its initial public offering, annual revenues have not stopped growing. Revenues did not rise exponentially after Netflix launched its streaming service; but in 2011, one year after it started internationalizing and after four years of growth in the United States, Netflix saw a growth of approximately 48% in revenues, compared with the previous year. Thereafter, revenues continued to grow at a lower but increasing rate.

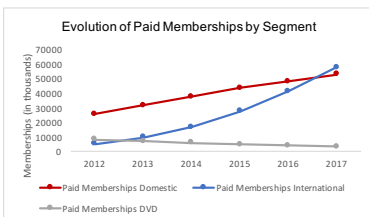


Figure 11: Evolution of Paid Memberships by Segment (2012 to 2017)
Source: Company Data

Looking into more recent years, paid membership growth for the Domestic Streaming Segment has slowed down (26% growth in 2012 and 10% in 2017), while the growth for the International Streaming Segment continues above 40%. As for the DVD segment, paid memberships have been decreasing at a yearly average rate of 17% (considering the last three years). Currently, the number of paid streaming subscribers worldwide is over 130 million and total revenues amount 3,999.37 million dollars, as of September 2018. Nevertheless, the company has been free-cash-flow negative for a long time and this situation is expected to continue for some years more (Netflix Official Website, 2018b). The gap between net income and free cash flow occurs mainly because of timing differences – cash payments for streaming content are weighted more upfront relative to streaming amortization expenses on the Income Statement (Netflix Official Website, 2018b).

Cost Structure, Main Assets and Liabilities

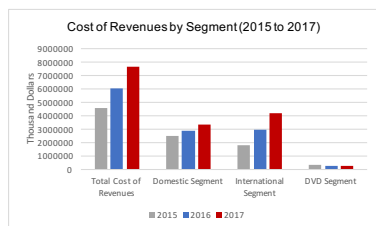


Figure 12: Cost of Revenues Evolution by Segment (2015 to 2017)

	2015	2016	2017
Working Capital	1902216	1133634	2203662
Operating Margin	0.05	0.04	0.07
ROA	0.03	0.03	0.05
ROIC	7.39	5.09	9.94

Figure 13: Total Assets and Liabilities and Proportion of Content Related Items (2015 to 2017)

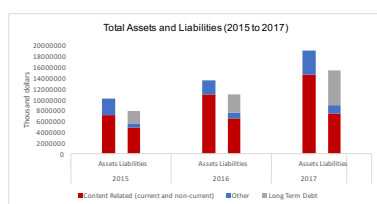


Figure 14: Liquidity and Profitability Ratios

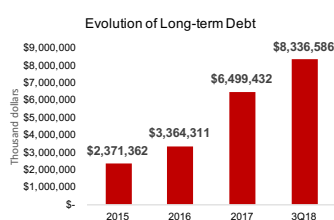


Figure 15: Evolution of Long-Term Debt (2015-2018)

Source: Company Data

	2015	2016	2017
Solvency Ratio	0.02	0.02	0.04
D/E	1.07	1.26	1.81
D/A	0.23	0.25	0.34
Interest Coverage	1.87	3.18	2.37

Figure 16: Solvency & Coverage Ratios

Netflix's costs are mainly of fixed nature. Licensing deals are usually for a fixed fee and a defined window of availability and payments demand more upfront cash relative to the expense that is recorded (amortization) (Netflix Official Website, 2018b). Even productions require certain multi-year commitments with third parties that are generally of long-term fixed cost nature (Netflix Annual Report, 2017). Costs with content are increasing mainly due to the growing emphasis on owned originals and international expansion (Netflix Official Website, 2018b) and, in the last three years, operating margin ranged from 4.3% to 7.2%.

Netflix's content library constitutes the main asset of the company. Once a title is acquired through licensing a content library asset, along with a content liability, is recorded on the balance sheet. For productions, costs are capitalized and amounts included in non-current content assets (Netflix Annual Report, 2017) (Netflix Official Website, 2018b). Working capital has been always positive and it grew this last year. As for the return on assets ratio, it grew in 2017 which means that management is getting more effective in converting the invested money into net income. Besides content liabilities, the other big proportion of liabilities belongs to Long-term Debt, which represents 42% of total liabilities. Return on invested capital assumed a value of 9.9 in 2017, which is slightly above the current industry average.

Capital Structure Analysis

As of the third quarter of 2018, Netflix counts with approximately \$8.34 Billion of long-term debt. This corresponds to a Debt to Market Capitalization ratio of 0.685. This ratio has been increasing, as well as Debt to book value of Equity and Debt to Total Assets (which corresponded to 1.81 and 0.34 in 2017, respectively). This is in line with the fact that the company prefers issuing debt rather than equity to finance its content investment. The company has chosen to do so given the current low interest rates, tax benefits and its low debt to enterprise value. Last April it raised \$1.5 Billion in debt, and it is currently planning to raise a further \$2Billion (Netflix Press Release, 2018). This will lead to a total of \$10 Billion in long-term debt, and most likely set these ratios higher. This isn't necessarily bad news for investors, as the company continues to yield impressive results, however it increases its risk profile: if the company does not turn cash flow positive in the next years as expected, it may have trouble paying its obligations. Considering this, as of 2015, Netflix's solvency ratio (which measures its ability to meet its obligations based on its cash flows) was 2.32%. The ratio improved to 4.09% in 2017, however this value is still quite low. Moreover, Netflix had an Interest Coverage Ratio of 2.37 in 2017, which decreased compared to the previous year. This relatively high value is a good

sign; however, it may be alarming if the ratio decreases further, in the case of, for example, interest rate hikes (Sommer, 2018). Nonetheless, the company foresees an improvement in its leverage situation as Cash Flows get closer to Break Even (Netflix Third Quarter Earnings Call, 2018).

Stock Performance

Netflix launched its Initial Public Offering on May 2002, selling at a price of 15.00 dollars per share. It is traded on the NASDAQ stock exchange as “NFLX” and, as of November 18th, has a 52-week high record of \$423.21, a low of \$178.38 and volume of 9,009,485 (Netflix Official Website, 2018c). Currently, Netflix has approximately 327 stockholders of common stock but a significantly larger number of beneficial owners (Netflix Annual Report, 2017). 76% of the company’s shares are held by institutions and 1.74% by insiders (Yahoo Finance, 2018). The company underwent a seven-for-one stock split on July 2015 (Netflix Annual Report, 2017) and its current number of shares is 436,080,000 (Bloomberg, 2018). Comparing the performance of Netflix’s stock and the one of S&P index in the last 3 years, Netflix shows higher cumulative returns.

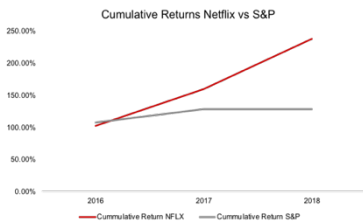


Figure 17: Cumulative Returns Netflix vs S&P
Source: Yahoo Finance, 2018

Price to earnings ratio has been decreasing since 2015, but in 2017 it was still over the current industry average, which is not surprising given that Netflix is still at a growing stage, contrary to its comparable peers. Concerning earnings per share, this ratio has been increasing since 2015 to 2017. Netflix has never announced or paid cash dividends and has no intention to in the foreseeable future (dividend payout is zero) (Netflix Annual Report, 2017).

	2015	2016	2017
P/E ratio	408.5	287.91	143.8
EPS	0.281	0.426	1.251

Figure 18: Market Efficiency Ratios

The Sector

The Entertainment and Media Industry

The entertainment and media industry is undergoing a rapid transformation, mainly driven by the growth of digital segments. Global digital services accounted for 48.4% of the industry’s revenue in 2017 (vs. 37% in 2013) and will start representing more than half of this income from 2018 onwards (PwC, 2017a). Consumer spending on digital media has “more than tripled” on the first half of this decade and is projected to “nearly double” in the second half, with a CAGR of 8%. Conversely, traditional media consumer spending (such as Pay TV subscriptions) has been slowing down (projected to grow at 1.3% CAGR until 2020) (PwC, 2017a). Overall, this growth in digital consumer spending is particularly strong for emerging markets: Africa and the Middle East will be the fastest-growing regions, projected to grow at a CAGR of 10.9% until 2020 (mainly due to the expansion of mobile broadband) followed by Latin America (CAGR of 7.6% until 2020) and Asia Pacific (CAGR of

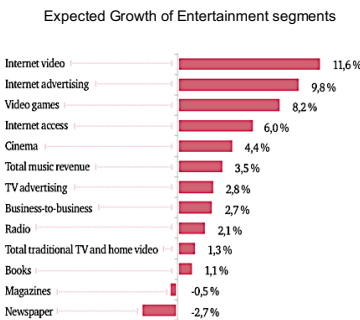


Figure 19: Expected global growth of Entertainment segments (2017-2020)
Source: PwC, 2017a

6.1%). Albeit at a slower pace, Central and Eastern Europe will also show significant growth (corresponding to a CAGR of 5.9%), while Western Europe and North America will most likely experience below average growth (corresponding to 2.7% and 2.9%, respectively, as these markets are maturing (McKinsey, 2016).

Streaming video-on-demand Segment

The Over-the-Top (OTT) video is one of the fastest growing sectors in the industry, powered by the rising popularity of streaming video-on-demand (SVOD) services (Eeden and Chow, 2018) (Statista, 2018a). The United States represent the segment's biggest market, having registered a total of US\$11.3 billion in SVOD revenue as of September 2018. As of 2017, 55% of US households pay a subscription streaming video service, while a decade ago only 10% of households did so (Deloitte, 2018a). The second largest market is Europe, which registered a revenue of US\$4.02 billion last year. Even though these markets are becoming saturated, they are expected to continue growing. Worldwide, 2018 figures indicate that around 250 million households use a subscription video service (which translates in a total revenue of US\$19.6 billion in 2018) (Statista, 2018b).

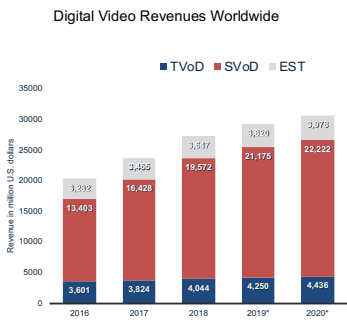


Figure 20: SVOD importance in worldwide digital video revenues
Source: Statista, 2018a

The Digital Consumer

Nowadays, consumers expect to view the content they desire whenever they desire. This is one of the reasons why streaming services are becoming so popular: they offer users convenience, control and flexibility to access content at all times. Furthermore, quality and content originality are highly valued. According to Deloitte Digital Media Trends Survey (2018), 54% of streaming video subscribers said they adopted a service because of its original content. Another key aspect is that the mobile device is becoming consumers' top choice for accessing media and entertainment, as they enjoy the convenience of watching content on the go. According to Ericsson (Ericsson ConsumerLab, 2017), approximately 70% of consumers across the world are watching video content on a smartphone.

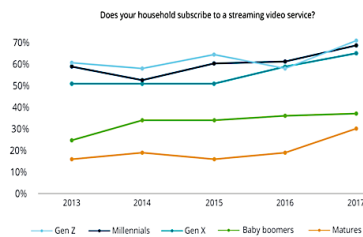


Figure 21: Streaming Video Subscriptions by Generation
Source: Deloitte, 2018

Concerning the typical users' age, streaming video services are most popular among younger generations such as Generation Z (individuals aged 14-20) and Millennials (aged 21-34), however the viewing habits of older generations (particularly generation X, individuals aged 35-51) are becoming similar to those of their younger counterparts. This can be seen as favourable in the SVOD industry given that this this generation has higher levels of disposable income and typically outspends younger generations in when it comes entertainment (Henderson, 2016). In the US, according to a Deloitte's survey (2018), 64% of Generation X households already subscribe to a streaming service, close to the percentage of 70% and 68% for Generation Z and Millennials, respectively.

Netflix within the industry

Netflix's main competitors are Amazon Prime Video and Hulu Plus. Hulu Plus is owned by 21st century FOX, Walt Disney, NBC Universal (a subsidiary of Comcast) and AT&T. Other Networks such as CBS ("CBS All Access"), HBO ("HBO Now") also own their own streaming services. Following this trend, Disney is also on the works of launching its own streaming service. YouTube also has its own subscription-based service, "Youtube TV" and "Youtube Red". Additionally, considering that Netflix has globalized its service since 2016, it is also competing with local providers from each country, many of which have a first-mover advantage against the US-based company.

	Users (millions)	International
Netflix	137	✓
Amazon	>26	✓
Hulu	>17	✗
HBO	17	✓
Youtube TV	0.8	✗

Figure 22: Netflix Comparison Chart

Netflix is currently the most successful player in the SVOD industry. This popularity is especially remarkable in the US, where 59% of adults subscribe to Netflix. Even though Amazon does not disclose all information about its Prime Video segment, it is reported to have around 26 million users in the US (Plaugic, 2018). Even though the company operates globally, its popularity is still very behind Netflix's. Nonetheless, there are some markets where Amazon has a higher market share, such as Germany, India, Japan and Brazil (Roshan, 2018).

Hulu was reported to have around 17 million US subscribers in 2017. Even though the company's popularity has been increasing, it still has a low subscriber base compared to Netflix. Besides this, Hulu is not available internationally. As for HBO, it is available in several regions of the world, but not globally. Looking at YouTube, its premium service is still at an early stage: YouTube TV only counts with 800,000 subscribers, and is only available in the US (Anon, 2018).

The company also competes indirectly with other forms of media and entertainment. There are other digital video alternatives such as the standard YouTube platform. Moreover, the company will keep competing with cable TV, as many households are not ready to "cut the cord" just yet. This becomes particularly critical considering the many individuals who enjoy watching the news or live stream sports (something Netflix is not interested in offering) (Netflix Third Quarter Earnings Call, 2017). Moreover, Netflix is also competing with free-of-charge alternatives, given that it is relatively easy for individuals to access content through piracy. This holds especially true in emerging markets: in Colombia and Mexico, for instance, over 75% of consumers are reported to watch pirated content, according to Statista (2017).

Netflix wins the Crown

Besides having the advantage of being a first-mover and innovator in the industry, what makes Netflix stand out from competition is that the company has the biggest collection of (high-quality) original content. Netflix launched 300 original shows in

Number of original titles produced by Netflix worldwide

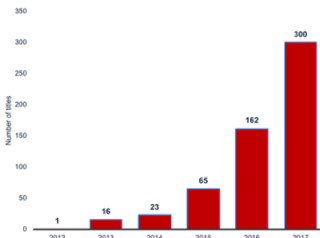


Figure 23: Number of original titles produced by Netflix worldwide
Source: Statista, 2018

Top Ten Netflix Series in the US in 2018

RANK	TITLE	STUDIO
1	THE OFFICE (U.S.)	NBC
2	CHILLING ADVENTURES OF SABRINA	NETFLIX
3	FRIENDS	Warner
4	GREY'S ANATOMY	ABC
5	HOUSE OF CARDS	NETFLIX
6	THE GREAT BRITISH BAKING SHOW	NETFLIX
7	MARVEL'S DAREDEVIL	NETFLIX
8	NARCOS: MEXICO	NETFLIX
9	THE HAUNTING OF HILL HOUSE	NETFLIX
10	CRIMINAL MINDS	CBS

Figure 24: Top Ten Netflix Series in the US in 2018
Source: 7Park, 2018

2017 and is expected to have produced a total of 700 titles by the end of 2018, which will result in around 8\$ Billion spent on content this year (The Economist, 2018). Netflix’s competitors have been following this trend, however they do not own a broad catalogue of originals quite like Netflix. HBO also has extremely popular, award-winning original content such as Game of Thrones (Bowman, 2018), however, the general consensus is that Netflix has the best original content, according to a Morgan Stanley survey (Levy, 2016).

The positive influence of original content can be noted through consumer viewing patterns: for instance, even though Netflix does not disclose viewership rates, the season 2 premiere episode of the original series “Stranger Things” registered an average of 15.8 million US viewers on the first days upon its release, according to Nielsen estimates (Spangler, 2018a). Moreover, according to 7Park estimates, original content accounted for 37% of Netflix’s streams in 2018 (an increase of 13% compared to the previous year) (Spangler, 2018b). If the company maintains this upward trend, it could be less prone to losing customers to competitor alternatives. Further, in the long-term, this focus on original programming allows the company to save in costs, by saving in licensing fees and relying less on outside studios, which add a “30% to 50% markup” to content productions (Lovely, 2018).

Furthermore, as Netflix went global in recent years, it has been making an effort to appeal to different foreign markets by producing local original titles: from the 700 titles planned for 2018, 80 are non-English productions (Spangler, 2018c). Many of these have been quite successful, not only in the local region where the show takes place, but all over the world. For example, Netflix’s first Brazilian show “3%” was one of the most viewed shows in the country, and, after being dubbed, it was also frequently watched in other Latin American countries. As a result, this local programming is driving international growth, and these initiatives are teaching Netflix how to adapt to different cultural tastes.

Finally, another advantage of Netflix’s service is that it enables users to download content and watch it later offline. Conversely, other providers such as Hulu require users to be connected to an Internet source at all times (Nield, 2018).

Pricing

Pricing Plans

	Lowest	Highest
Netflix	\$7.99	\$13.99
Amazon	\$8,25	
Hulu	\$7.99	\$11.99
HBO	\$9.99	\$14.99
Youtube TV	\$40	

Figure 25: Price Plan Comparison of selected streaming services

Netflix is competitively priced within the industry. Its pricing plans range from \$7.99 to \$13.99 a month (even though prices vary from country to country). Hulu can charge from \$7.99 to \$11.99 a month; however, the cheapest price plan includes advertisements, which positions Netflix at an advantageous position (Hulu Official Website, 2018). In the case of Amazon, consumers can access Amazon Prime for an average of \$8.25 a month, which offers a broader range of content compared to Netflix, including both exclusive content and content also available on Netflix

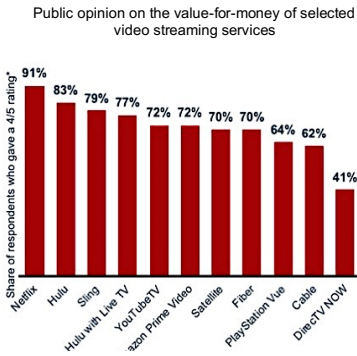


Figure 28: Public opinion on the value-for-money of selected video streaming services in the US (as of February 2018)
Source: Statista, 2018b

(Amazon Official Website, 2018). As for HBO, the \$9.99 special price for students may pose a challenge to Netflix, however, the 14.99\$ price for other users places HBO as a costly alternative compared to its peers (HBO Official Website, 2018). All in all, Netflix offers great value-for-money, given its abundance of content and the lack of commercials. Considering this, the company still has room to increase its prices and it can be verified that the company holds pricing power: even though streaming video subscribers are generally price sensitive (Statista, 2018b), the company increased its prices twice in recent years and its number of subscriptions was not negatively impacted. This may be especially critical to Netflix’s success: its continuous investment in content comes at a big expense, and therefore the company may be forced to keep rising prices in the future (Statista, 2018b).

Increasing Competition

The streaming video-on-demand market is becoming increasingly competitive, giving the numerous alternatives available to consumers, including free of charge ones. As new competitors emerge, the company’s leading position in the industry may be threatened. This becomes especially true considering that this new competition comes from established players from the media industry who, even before debuting their own streaming services, are arguably “Content Kings” as much as Netflix is (such as Disney). Moreover, these players have been using strategic partnerships, as well as mergers and acquisitions as a way to consolidate their positions and gain power, increasing the number of content available to users. As these companies take over, Netflix is susceptible to lose a significant share of its content, which may decrease its value proposition in the future (Cruz, 2018). All things considered, it becomes particularly important for Netflix to keep producing original content and reduce its dependence on third party agreements. The availability of quality media appears to be consumers’ main concern, so in the end it all comes down to who can offer the best content while maintaining an affordable price. And Netflix seems to be leading that race.

Intrinsic Valuation

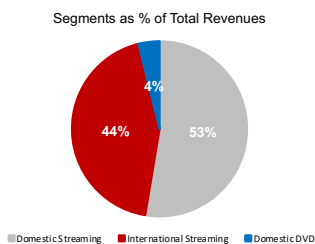


Figure 26: Segments as a % of Total Revenues, 2017
Source: Company data

To estimate Netflix’s intrinsic value based on a Discounted Cash Flow analysis, an explicit period of 10 years (from 2018 to 2028) was considered. The values from 2018 are based on the company’s actual statements (retrieved from its quarterly results), except for the last quarter (October-December 2018), which was forecasted based on the Netflix’s performance throughout the year and information given on shareholder letters. Moreover, it is assumed that one membership corresponds to one household.

Membership Forecast

Netflix is divided into three segments: Domestic Streaming, International Streaming and DVDs and all three segments derive revenues from monthly memberships fees. Currently, the Domestic Streaming segment is the one that represents the biggest part of total revenues, followed by the International segment and finally the DVD segment. The International Streaming segment is currently the one that is growing the most, with an average yearly growth rate in revenues of 61.43%. As for the Domestic DVD segment, it is declining. Memberships are falling every year at an average rate of 16.59% (considering the last three years).

Concerning the Domestic Streaming segment, Netflix is expected to have 58,384 thousand paid memberships by the end of 2018. Assuming that Netflix's total market corresponds to the number of households who have access to broadband internet, this corresponds to a penetration rate of 55%. As of 2018, it is assumed that approximately 80,061 thousand of U.S. households subscribe to at least one streaming service (Mercer, 2018), corresponding to a penetration of 75% for the total streaming market, which means that only 20% of streaming consumers subscribe to a service other than Netflix. The growth of US memberships has been slowing down for the past few years, however there is still room to grow. Netflix is making major content investments in 2018 and following years, as well as increasing its Marketing Budget. Bearing this in mind, and assuming the company will uphold its leading position in the industry, we can expect this to increase the number of subscriptions, especially in the next 3 years. As such, it is predicted that the growth of U.S. Netflix memberships will become relatively stable (around 2-3%) from 2023 onwards, and the company will reach a penetration rate of approximately 75% in 2028. This assumes that 16% of consumers will opt to use a competitor streaming service instead of Netflix. Considering this, the company is expected to have 94,068 subscriptions by 2028. Another important remark is that the forecasted penetration rates were paralleled with the penetration of pay TV (satellite and cable) when it was introduced in the region, and with the diffusion of this service throughout subsequent years. For instance, pay TV reached a peak penetration rate of 87% in the US in 2006 (Euromonitor International, 2018c), which is a slightly below the forecasted penetration of the total streaming market in 2028 (91%). This is expected since younger audiences are more receptive to all-forms of media, particularly in digital platforms, and thus more prone to adopt the service. This becomes especially true considering how immediate it is to subscribe to a streaming platform, something valued by Millennials and generations alike.

The International Streaming segment was divided into 7 regions: Canada, Western Europe, Eastern Europe, Latin America, Asia Pacific (excluding China), Middle East

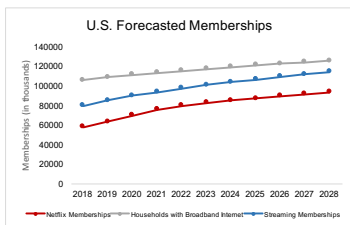


Figure 27: Forecasted memberships for the domestic segment (US)

and Africa and Rest of the World. The U.S. was used as a benchmark to estimate the future penetration rates and respective memberships for these regions, with additional factors taken into account. Key determinants include: (1) The year Netflix entered the region; (2) The degree of similarity with the US culture and consumer tastes; (3) The diffusion of mobile entertainment devices such as laptops, smartphones and tablets; (4) The number of established competitors in the region. With an expected 5,599 thousand memberships, Netflix's penetration rate in Canada will be approximately 44% in 2018. Canada was the first country Netflix expanded to in 2010. Total penetration of the streaming market is 64% in 2018 and Netflix is the current market leader (Mercer, 2018). Again, as the company invests in its content strategy and expands its marketing budget, this favourable position in the industry is expected to keep improving. Coupled with the fact that the country shares a great deal of similarities with the United States in terms of culture and tastes, this market is expected to reach almost the same penetration as the U.S., corresponding to a 72% penetration rate for Netflix in 2028. We expect Netflix to hit a relatively steady membership growth (around 2%) just one year after the U.S., that is, in 2024. Total penetration of the streaming market in 2028 is expected to be 86%, and competitor's penetration to assume a percentage of 14%. Looking at the penetration of pay TV for the time period deemed comparable (in this case, from 1983 to 1993, based on how many years had passed since the introduction of this media and how penetrated the market was at the time), this total streaming penetration is similar, though somewhat higher, for the same reasons highlighted for the U.S. (Pay TV reached a 77% penetration in 1993, and kept growing at small rates from thereon).

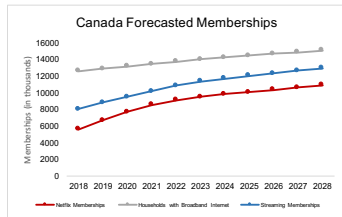


Figure 28: Forecasted memberships Canada

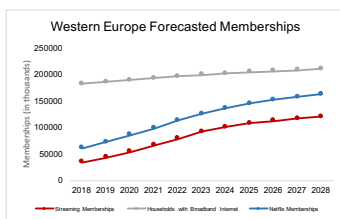


Figure 29: Forecasted memberships in Western Europe

Looking into Western Europe, Netflix's penetration rate of 2018 corresponds to 18.83%. Netflix started expanding to the region in 2012 and it became available in every country in 2016. Much like Canada, Western Europeans have similar entertainment tastes as those of U.S. consumers, therefore we can assume that Netflix's current and new content will be well received, and marketing efforts will be successful in the region. However, some European countries have other well-established competitors. For example, Amazon Prime is the market leader in Germany and there are some local providers as well, as is the case of France, that already own the rights to stream some of Netflix's content (Scott, 2014). Moreover, the cord-cutting phenomenon is less pronounced in Europe. Considering this, the number of Netflix subscribers in the region will still grow by a considerable amount (around 15%) for some years, and then start slowing down after 2025. For the reasons mentioned, we can expect Netflix to reach a penetration of just over 57%, representing 107,173 thousand memberships in 2028. Penetration for competitors is expected to be 20%, which is smaller in relative terms to the current one (15%

out of 33% for the total streaming market). Again, this means that the total penetration rate of the streaming market (77%) will be higher than the penetration of pay TV, which reached a peak of 58% in 2012 and has been slowing down since then (Euromonitor International, 2018d).

Netflix has a low penetration rate in Eastern Europe: it is expected to reach 4.4% in 2018. Eastern European citizens' tastes are not as similar to the U.S.; these households are not ready to abandon traditional cable, and local TV stations are still particularly popular in the region, especially since they offer content in local language (Eshun, 2016). In fact, the penetration rate of pay TV has still been rising (currently assuming 64%), and only now, in 2017, has it began to fall (Euromonitor International, 2018e). Furthermore, the possession of smart mobile devices is not as strong as in Western Europe, though in the long term it will be identical (Euromonitor International, 2018a). Considering this, there is still room to grow in Eastern Europe, and we project the company will reach a penetration rate of 14% in 2028, which corresponds to a total of 14,986 thousand memberships. As for the total streaming market, it is expected to assume 20% penetration. Besides the reasons highlighted before, other factors that contribute to this small number are the prevalent low levels of disposable income among the population, and reluctance to use credit cards (Dreier, 2018). We project the growth for Netflix penetration to be more concentrated in later years (around 20% in 2023 and 2024), when Netflix grows its offer of local content (Netflix only premiered its first two eastern European TV shows in 2018) (Feldman, 2018), and then continue in subsequent years (with a 6% growth assumed for 2028), as more consumers leave cable.

Netflix launched its service in Latin America in 2011. Even though there are several competitors in the area (both international and local ones), the company is the current market leader (GlobalData, 2018). There are currently 18,443 thousand households who subscribe to Netflix, corresponding to a penetration rate of 21% in 2018. This penetration is higher than the one of Western Europe, for example; however, we believe the region has a higher growth potential, considering its network infrastructures are still developing and possession of smartphones is becoming increasingly common (which is considered the preferred media platform in the region) (Passport, 2018a). Therefore, even though Netflix introduced itself on the region in earlier years, it is expected to display strong levels of growth throughout the next decade: growth will be more concentrated in early years (around 15%), since the company is already producing local-language programming in the region; even after slowing down, around 2024, Netflix's memberships will maintain relatively high growth rates (around 7% from that year onwards). By 2028, Netflix will reach a penetration rate of 38%, corresponding to 53,949 thousand memberships. By this time, the total streaming market will have

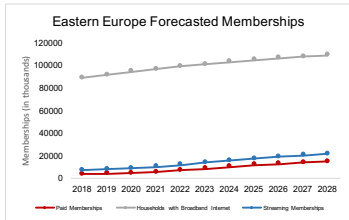


Figure 30: Forecasted memberships Eastern Europe

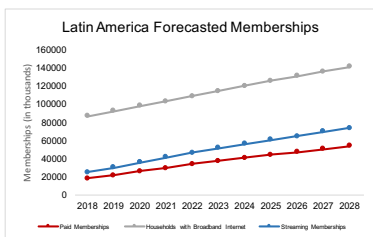


Figure 31: Forecasted memberships Latin America

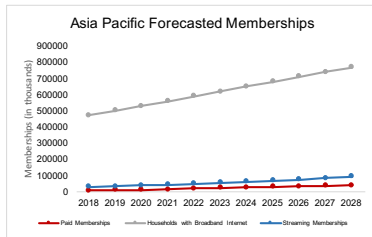


Figure 32: Forecasted memberships Asia-Pacific Region

reached a forecasted penetration of 52%. This value is similar to the current penetration of pay TV in the region, which is still increasing every year: it went up from 25%, ten years ago, to 53% in the present (Euromonitor International, 2018f). The Asia Pacific region has a total streaming penetration rate of 6.5% in 2018. However, Netflix's penetration corresponds to only 2%. This region includes Australia, where viewers are known to appreciate U.S. TV shows and movies, and competition is not as fierce (Powell, 2017). However, the company's penetration rate is most likely being dragged down by Asian countries, especially considering that China is excluded from the equation. While some high-income countries in the region may be welcoming to the service, other countries (such as India) may prove more challenging to penetrate, based on cultural and economic differences, as well as preference for local content (Szalai, 2014). This is aggravated by the fact that there are well-established local competitors in the region (such as the popular streaming service iFlix) that are up to 3 times more affordable than Netflix (CB Insights, 2017). Given this, we expect Netflix to have 40,641 thousand memberships in 2028, corresponding to a penetration rate of 5.28%. However, this number will still grow by a considerable amount (around 10.4%) in following years, as consumers are not abandoning pay TV just yet (its penetration has been growing and will continue doing so for the next decade) (Euromonitor International, 2018g). The total streaming market is forecasted to reach a 12% penetration in 2028, which means that remaining competitors will still represent more than half of total streaming memberships.

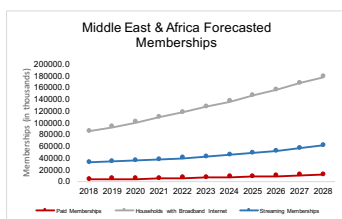


Figure 33: Forecasted memberships Middle East & Africa

Netflix launched in the Middle East & Africa in 2016, having attained a penetration rate of 5% in 2018. There are areas in the region (such as United Arab Emirates and Israel) that are very technologically advanced and may further Netflix's integration in the area. Moreover, the diffusion of smartphones and tablets will experience outstanding growth in the future in the region, including Africa (from 52% in 2018 to 89% in 2028) (Passport, 2018b). However, there are big cultural and linguistic gaps between these regions and the United States. Even though the company is debuting its first local middle eastern show in 2019 (White, 2018) the company's adaptation may still be a challenge, especially considering the abundance of local competitors in the area (Fingas, 2018). As such, in this region Netflix is estimated to reach a penetration of 7% in 2028, which corresponds to 11,8784 thousand subscribers. As for the total streaming market, its forecasted penetration corresponds to 15%, which means that, even though there will be a slight improvement, Netflix will not completely dominate this market for the time being. Nonetheless, a yearly membership growth of around 13% is expected from there on. Further, pay TV penetration is still growing in the region (currently corresponding to approximately 38% penetration) and will continue doing so in the

foreseeable future (Euromonitor International, 2018h), therefore it will still take some time before the streaming market reaches its full potential in the region. Since Netflix only went fully global in 2016, it will keep growing its number of memberships in the Rest of the World, reaching 6,218 thousand members in 2028. The DVD segment revenues have been decreasing at an increasing rate, and we predict this trend to continue. Overall, this will result in total decrease of almost 100% from 2018 to 2028.

Pricing

Netflix has three different pricing plans that users can choose from; however, it does not disclose information about users' pricing plan choices, therefore an average price was used. Netflix's average price in 2018 corresponds to \$11.4 for the domestic segment and \$8.95 for the international segment (Netflix Letter to shareholders Q1, 2018). Most recently, Netflix rose prices in 2016 and 2018 by 12% and 13% for the domestic and international segment, respectively, without impacting negatively its number of subscribers. Therefore, we can expect further price increases, given that Netflix is spending billions on content and these price hikes will likely be necessary to maintain or increase profitability. Additionally, price increases, especially in the more developed markets, can be used to support the recent expansion for new lower-priced geographies. Furthermore, given the broad range of content Netflix currently owns, which most consumers perceive to be superior among the industry, and the fact that it is still reasonably priced compared to most competitors, Netflix still has the power to increase prices. Taking this into account, we can expect further price hikes (again, of 12 and 13%) in the foreseeable future, in approximately every two years. Besides this, a US forecasted yearly inflation rate of 2.3% was considered throughout the whole period for the domestic segment (Comstat, 2018), as well as the corresponding inflation rates for each international region (Euromonitor International, 2018b).

Revenues Forecast



Figure 34: Forecasted Total Revenues

Revenues in 2018 will correspond to 15.8 billion dollars. In 2028 this value is expected to reach 54.0 billion dollars, more than triple the amount of 2018 (an increase of 241.1%). This corresponded to an average yearly growth of 13.35%, with a growth rate of 4.5% in 2028. With a share of 66.1% of total revenues in 2028 (vs 49% in 2018), the international segment will make up the majority of revenues.

Content Investment & Cost of Revenues Forecast

As the company focuses on its content strategy and attempts to increase its penetration in new markets, a big content investment is expected, especially in the

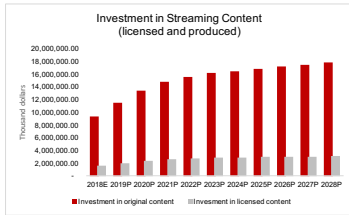


Figure 35: Forecasted Investment in licensed and produced content

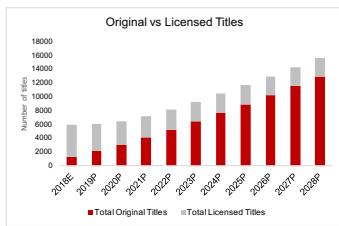


Figure 36: Forecasted amount of original and licensed content

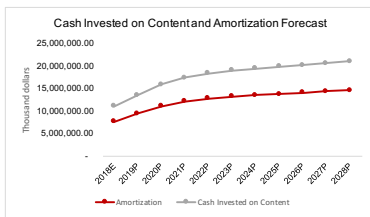


Figure 37: Forecasted Amortization and Cash Spent on Streaming Content Assets

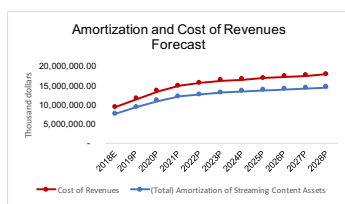


Figure 38: Forecasted Cost of Revenues and Amortization

next 2 to 3 years. Netflix recently stated that around 85% of its content spending will go towards original productions (Spangler, 2018d), which corresponds to \$6.5 Billion in 2018 and a final number of 700 new productions for the year. Licensed content still makes up more than 75% of Netflix’s library, however the company is striving to attain a 50/50 mix of original and licensed titles (Netflix 2Q16 Earnings Call). Considering this, as the company continues ramping up its number of original productions, we expect the number of original titles to surpass the number of licensed titles from 2021 onwards. By 2028, the company is estimated to own a total of 12,883 original titles, corresponding to 1371 productions for the year and nearly \$17.9 billion invested (vs. \$3.2 billion for licensed content).

Netflix accounts for content spending (licensed and produced) through streaming amortization expenses. Amortization of streaming content assets is done on an accelerated basis, due to expected upfront viewing, and over a maximum of 10 years after the content is made available for Netflix’s use (Netflix Annual Report, 2017). Cash spent on content to amortization ratio has been at a constant rate of 1.44 and there are no reasons to assume changes to this ratio in the future. Considering Netflix’s large content investment, we expect amortization to increase at growth rates around 20% in the upcoming years. However, after that period growth is expected to continue but at decreasing rates and assume, at a more mature stage, a growth of 2% a year, reaching approximately \$14.7 billion in 2028. Amortization constitutes a great proportion of Cost of Revenues. Thus, Amortization to Cost of Revenues ratio was used to predict the cost of revenues. According to this estimation, Cost of Revenues is predicted to reach 9.4 billion dollars in 2018 and 18.0 billion dollars in 2028.

Content Assets

Streaming content assets are expected to increase, maintaining the upward trend observed in the past few years. These are forecasted as a percentage of cash spent on streaming content assets. Current content assets are expected to assume a percentage of 52% in 2018. This number will likely decrease in the next few years, as Netflix invests predominantly in original programming (which are only recorded as non-current content assets), and will only stabilize in 2021. As for non-current content assets, its value as a percentage of cash spent has been increasing. For the same reason, this trend is expected to continue for some years, before becoming more stable again in 2021, when the company attains a greater subscriber base and reputation.

Content Liabilities

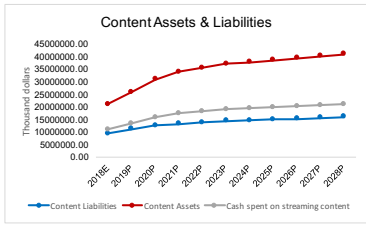


Figure 39: Forecasted Content Assets and Content Liabilities

As content investment increases, content liabilities (both current and non-current) will increase as well. However, as a percentage of cash spent on streaming content, they are expected to slightly decrease, as they have been in the recent past. A reason that explains this is the fact that licensing is a big part of the recorded liabilities; therefore, as focus on productions intensifies, its portion in the company's content library will decrease. Non-current content liabilities are forecasted to represent around 6.7 billion dollars in 2028.

Marketing Forecast

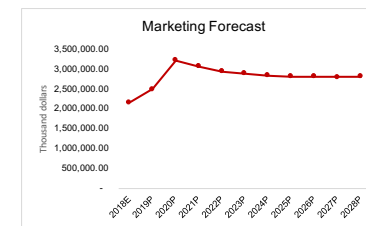


Figure 40: Forecasted Marketing Expenses

We believe Marketing will grow as memberships keep growing, therefore its cost was forecasted based on a percentage of revenues. In the past 3 years, Marketing expenses have represented 11 to 12% of total revenues. The company's Marketing Budget for 2018 corresponded to \$2 Billion, and this budget is expected to increase substantially in the next years to attract new consumers (especially in new international segments) and keep existing ones from leaving. This becomes especially important as new entertainment alternatives are emerging. Considering this, we expect Marketing costs to represent 13.6% of revenues in the next years, reaching a peak value of \$3.2 Billion in 2020. From 2021 onwards, this percentage will start decreasing, as some markets are beginning to stabilize (such as Canada and the US) and others are becoming more aware of Netflix's service and content library. Besides, it is expected that content quality and reputation will prevent the company from relying intensively on marketing activities. Nonetheless, even though they are decreasing, Marketing Costs will still correspond to just under \$3 Billion throughout the years for the time considered (2021-2028).

Technology, General and Other Expenses Forecast

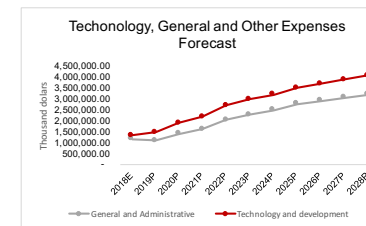


Figure 41: Forecasted Technology, General and Other Expenses

Technology & Development costs, that mainly include expenses related with improvement, maintenance and testing of the network's user interface (Netflix Annual Report, 2017), are expected to increase in the next 2 to 3 years. From 2021 onwards, as the company becomes more efficient in its operations, these are expected to decrease as a percentage of revenues.

General & Administrative costs, that consist of payroll and other related expenses for corporate and support personnel (Netflix Annual Report, 2017), are expected to increase as memberships/revenues increase. As so, they were assumed to maintain a rate of around 6% of revenues.

Operating Margin



Figure 42: Evolution of Forecasted Operating Margin

Operating margins have been low since 2015, and this will continue as Netflix increasingly produces content rather than licensing it. However, as subscribers

increase, its operating margin is expected to increase. More specifically, the relative cost of streaming contents will decrease in relation to revenues. As so, we predict that margins will increase, especially in the first four years of the explicit forecast period (2018-2028), reaching approximately 31.9% in 2022.

$$Rd = ytm - p * L$$

Netflix Rating	Ba3
Yield of a 10y fixed income bond	6.06%
Probability of default (p)	1.47%
Expected Loss rate (L)	46.15%
Cost of Debt	5.39%

Figure 43: Cost of Debt

WACC

The rate used to discount Netflix's core free cash flows was the Weighted Average Cost of Capital (WACC). The capital structure considered was Netflix's target capital structure for the long-term (25%) (Netflix Third Quarter Earnings Call, 2018) instead of the current one (which corresponds to 6.9% at market values).

Netflix is rated Ba3 by Moody's Rating Agency. As such, it is important that the company's default probability is accounted for in the cost of debt calculation. Cost of debt was calculated using a 10-year fixed income corporate bond with a yield of 6.06% (Bloomberg, 2018). The annualized probability of default for a company with this rating is 1.47% and the expected loss rate is 46.15% (it is a senior unsecured obligation), which results in a cost of debt of 5.39% (Moody's, 2018). Considering an effective core tax rate of 20.49%, after-tax cost of debt is 4.28%.

The cost of equity was calculated based on the Capital Asset Pricing Model (CAPM). The risk-free rate used was the yield of a 10-year US government Bond, which corresponded to 3.078% (Investing.com, 2018), and the Market Risk Premium, corresponding to 5.5% was calculated based on KPMG's 2018 research on MRP (Weimer, 2018). The company's Beta was calculated by regressing Netflix's weekly returns against those of the Market (measured by the S&P500 Index). Only 3 years of weekly data were considered, given that Netflix is a growing company that recently became global, thus a longer period could make the analysis less reliable. This corresponded to a beta of 1.63. However, since this result is based on historical information, several techniques were employed to improve its accuracy. These techniques exclude comparable company data, which was deemed inadequate for this analysis, since most of Netflix's competitors operate in other activities besides streaming. Looking at Netflix's 6-month and 1-year rolling betas, they have been somewhat volatile, with no noticeable pattern. Moreover, the regression beta has a wide 95% confidence interval, ranging from 1.09 to 2.16. Finally, the historical beta obtained does not incorporate Netflix's long-term prospects. As such, this beta was unlevered and releveled, replacing Netflix's current debt to market capitalization ratio for its long-term target capital structure. This resulted in a levered beta of 1.95. Nevertheless, we believe that, in the long-term, Netflix's returns will not deviate that much from those of the market. Under this assumption, an adjustment was made to bring the company's beta closer to 1.

$$Re = Rf + \beta(Rm - Rf)$$

Risk-free rate (Rf)	3.078%
Company Beta	1.57
Market Risk Premium	5.50%
Cost of equity	11.71%

Figure 44: Cost of Equity

$$\beta_e = \beta_u * \left(1 + (1 - t) * \frac{D}{E}\right)$$

Historical Beta (Regression)	1.63
Current D/E (market values)	0.069
Target D/E (market values)	0.25
Unlevered Beta	1.54
Re-levered Beta (with target D/E)	1.85
Adjusted long-term Beta	1.57

Figure 45: Beta calculations



Figure 46: 6-month and 1-year Rolling Betas

$$WACC = \frac{D}{D+E} * Rd * (1-t) + \frac{E}{D+E} * Re$$

Cost of Equity (re)	11.71%
Cost of Debt (rd)	5.39%
Target D/E ratio	25%
Tax Rate	20.49%
WACC	10.22%

Figure 47: WACC calculations

This resulted in a final beta of 1.58. With these inputs, a Cost of equity of 11.71% was obtained. This corresponds to a final WACC of 10.22%.

Free Cash Flow, ROIC and Target Price

At the moment, core business free cash flows are negative. This is not surprising given the major content investment that Netflix is currently undergoing. This situation is to continue and reach its peak in 2018. Past 2018, Netflix is expected to increase its free cash flow as Return on Invested Capital increases. Netflix's Return on Invested Capital (ROIC) will increase significantly throughout this period until 2022 (going from 10.6% in 2019 to 41% in 2022). By 2022, this value will have surpassed the Entertainment Industry's average of 31.22% (Damodaran, 2018). Furthermore, while in 2018 and previous years this gap has been relatively small, from 2019 onwards the company's return will be substantially higher compared to its cost of capital. Considering this, Free cash flow turns positive in 2021 (when ROIC reaches approximately 22%) and is expected to increase further from this year onwards. Past the explicit period considered, Netflix is believed to continue growing at a rate superior than the long-term economy one. The reason is that the company will keep growing internationally, given that some markets will not be entirely saturated by 2028, and the company will still have room to increase its penetration rates (especially in the Middle East and Africa, Asia Pacific, Eastern Europe and Latin America, with growth rates of approximately 13%, 10%, 5.8% and 6%, respectively). Therefore, a 10-year growing annuity (2028-2038) was considered, with a growth rate of around 4.78%. After this period, a growing perpetuity was assumed, with a growth rate of 2.4%, corresponding to the predicted growth rate of the global economy (PwC, 2017b). Calculations led to an enterprise value of 184,028,979.91 dollars. After adjusting the value by subtracting the company's value of Net Debt (corresponding to approximately \$8.8 Billion) – an Equity Value of 175,210,075.55 dollars was obtained, which equals a value per share of \$401.78.

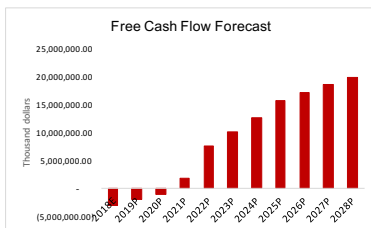


Figure 48: Forecasted FCF

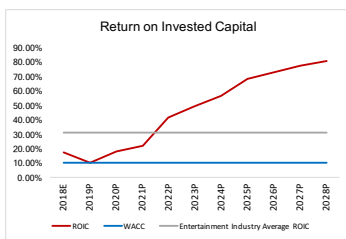


Figure 49: Evolution of Forecasted ROIC

Relative Valuation

Comparables

Seven key companies were chosen to integrate Netflix's peer group. The companies selected operate in the same industry or share similarities in terms of business model: the companies are technology-based, provide video entertainment content and/or operate in the streaming video-on-demand industry and all have an international reach. The size of the companies (based on their Market Capitalization) and their profitability (based on revenue growth and profit margins)

were also taken into account, as well as the degree of financial risk (measured through financial leverage). Given this, the chosen companies are Walt Disney, 21stCentury FOX, Vivendi, Comcast, Charter Communications, AT&T and Amazon. Multiples considered for this valuation include the trailing and forward price-earnings ratio (P/E), the Price to Book Value ratio (P/BV) and the EV/EBITDA ratio. Other multiples such as the price-earnings-growth (PEG) ratio and EV/Sales were considered, taking into account that Netflix is a fast-growing company, while some of its peers are already in a more mature stage.

Relative Valuation Results

By attributing different weights to each multiple (as some are more suitable than others for the stage Netflix is in), the final Share Price of Netflix corresponds to \$124.6. An important remark is that this value is merely indicative, considering that some of the comparable companies operate in multiple business sectors besides streaming video, which may reduce the accuracy of the multiples used.

Multiple	NFLX Share Price	Weight of multiple
Trailing P/E	191.74	13%
Forward P/E	110.38	13%
PEG	224.80	20%
EV/EBITDA	33.79	20%
EV/Sales	107.62	20%
P/BV	82.93	13%
Final Price	124.6	

Figure 50: Price Based on Relative Valuation

Sensitivity & Scenario Analysis

The sensitivity analysis focused on two variables that impact this valuation – growth rate applied to the annuity and the WACC. For this analysis, the growth rate ranged from 3.82% to 5.73% and the impact on equity value was 5.26% for the optimistic case and -4.91% for the pessimistic. As for the WACC, its impact on equity value was considerably larger – a WACC of 12% would turn share price to \$300.88 (a decrease of 25.11%) and a WACC of 7% would increase equity value in 99.58%.

For the scenario analysis, two additional scenarios were developed, a pessimistic (Attachment 3) and an optimistic one (Attachment 4). The pessimistic scenario offers a view on how Netflix would be affected as competitors integrate and fight for exclusivity of streaming content, while the optimistic one focuses on the possibility of Netflix introducing a new pricing tier.

Both Scenarios, pessimistic and optimistic, will be considered in our valuation with a weight of 20%, leaving us with an expected price of \$361.27 per share.

Input	Share Value	Change in Equity Value
5.73%	722.90	5.26%
g annuity 4.78%	401.78	0.00%
3.82%	382.06	-4.91%
12%	300.88	-25.11%
WACC 10.22%	401.78	0.00%
7%	801.88	99.58%

Figure 51: Sensitivity Analysis

	Pessimistic	Base Case	Optimistic
Share Price	190.34	401.78	410.64
Weight on Final Share Value	20%	60%	20%
Final Share Price	361.27		

Figure 52: Final Price based on the three scenarios

Final Recommendation

At present, Netflix's share is trading at the value of \$279.22 (Bloomberg, as of 4/12/2018). The valuation suggests that Netflix's real fair value is approximately \$361.27 – that is, Netflix's stock is considered to be slightly overvalued at the moment, being traded at a discount of approximately 9.66%. Taking this into consideration, the recommendation for an investor regarding Netflix's stock is "Buy".

References

- Alomari, Saleh and Putra Sumari. 2011. "Statistical Information of the Increased Demand for Watch the VOD with the Increased Sophistication in the Mobile Devices, Communications and Internet Penetration in Asia". The International Journal of Multimedia & Its Applications Vol.3, No.4.
- Alsin, Arne. 2018. "The Future of Media: Disruptions, Revolutions and The Quest for Distribution". Last accessed December 19. <https://www.forbes.com/sites/aalsin/2018/07/19/the-future-of-media-disruptions-revolutions-and-the-quest-for-distribution/#10642ed260b9>
- Amazon Official Website. 2018. Last accessed December 19. <https://www.amazon.com/amazonprime>
- Anon, John. 2018. "Report: YouTube TV Now At 800,000 Subscribers & Losing Money". Last accessed December 19. <https://www.androidheadlines.com/2018/07/report-youtube-tv-now-at-800000-subscribers-losing-money.html>
- Armstrong, Drew. 2018. "Netflix Considers Cheaper Prices to Chase Boom in India Viewers". Bloomberg. <https://www.bloomberg.com/news/articles/2018-10-17/netflix-considers-cheaper-prices-to-chase-boom-in-india-viewers>
- AT&T Official Website. 2018. Last accessed December 19. <https://www.att.com>
- Bloomberg. 2018. Last accessed November 21.
- Bode, Karl. 2018. "The Rise of Netflix Competitors Has Pushed Consumers Back Toward Piracy". Last accessed December 19. https://motherboard.vice.com/en_us/article/d3q45v/bittorrent-usage-increases-netflix-streaming-sites
- Borak, Masha. 2018. "Chinese internet users grow to 772 million". Last accessed December 19. <https://technode.com/2018/01/31/chinese-internet-users-772-million/>
- Bothun, Deborah and Tom Silver. 2017. "Perspectives from the Global Entertainment and Media Outlook 2017-2021". PwC. <https://www.pwc.com/gx/en/entertainment-media/pdf/outlook-2017-curtain-up.pdf>
- Boulay, Juliette. 2018. "SVOD in Asia Pacific: the gold rush". Dataxis. <http://dataxis.com/wp-content/uploads/2018/03/SVOD-in-Asia-Pacific- -the-gold-rush.pdf>
- Bowman, Jeremy. 2018. "How Netflix is Stacking the Deck Against the Competition". Last accessed December 19. <https://www.fool.com/investing/2018/04/29/how-netflix-is-stacking-the-deck-against-the-compe.aspx>
- Comstat. 2018. "US Inflation Forecast 2018, 2019 and up to 2060, Data and Charts". Last accessed December 19. <http://comstat.comesa.int/kyaewad/us-inflation-forecast-2018-2019-and-up-to-2060-data-and-charts?lang=en>
- Cruz, Victor. 2018. "The Dystopian Future of Too Many Streaming Services". Last accessed December 19. <https://3rdworldgeeks.com/2018/01/16/the-dystopian-future-of-too-many-streaming-services/>
- Damodaran, Aswath. 2018. "Margin/ROIC by Sector (US)". Last accessed December 19. http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/mgnroc.html
- Deloitte. 2018. "Deloitte Digital Media Trends Survey"

- Deloitte. 2018b. "2018 Media and Entertainment Industry Outlook: Reaching new heights through personalization and mobility"
- Digital TV Research. 2018. "Asia Pacific: 351 million SVOD subs by 2023". https://www.digitaltvresearch.com/ugc/Asia%20Pacific%20OTT%20TV%20and%20Video%20Forecasts%202018%20TOC_toc_209.pdf
- Donnelly, Matt. 2018. "WarnerMedia to Launch Direct to Consumer Streaming Service in Late 2019". Last accessed December 19. <https://variety.com/2018/biz/news/warnermedia-direct-to-consumer-streaming-service-john-stankey-1202975598/>
- Dreier, Troy. 2018. "SVOD Accounts Triple in Europe, Pay TV Accounts Nearly Flat". Last accessed December 27. <http://www.streamingmediaglobal.com/Articles/News/Featured-News/SVOD-Accounts-Triple-in-Europe-Pay-TV-Accounts-Nearly-Flat-128362.aspx>
- Durou, Emmanuel. 2018. "Technology, Media and Telecommunications Predictions 2018 – Middle East Edition". Deloitte. https://www2.deloitte.com/content/dam/Deloitte/xs/Documents/technology-media-telecommunications/me_tmt-predictions-2018.pdf
- Eeden, Ennèl, and Wilson Chow. 2018. "Perspectives from the Global Entertainment and Media Outlook 2018-2022". PwC. <https://www.pwc.com/gx/en/entertainment-media/outlook/perspectives-from-the-global-entertainment-and-media-outlook-2018-2022.pdf>
- Epstein, Adam. 2016. "It's not your imagination: Netflix US has a much smaller selection than it used to". <https://qz.com/646874/its-not-your-imagination-us-netflix-has-a-much-smaller-selection-than-it-used-to/>
- Ericsson ConsumerLab. 2017. "TV and Media 2017". <https://www.ericsson.com/assets/local/trends-and-insights/consumer-insights/consumerlab/reports/tv-media-2017-consumer-and-industry-insight-report.pdf>
- Eshun, Ekow. 2016. "Why Netflix is a turn-off for Eastern Europe". Last accessed December 19. <https://www.calvertjournal.com/news/show/6262/netflix-eastern-europe>
- Euromonitor International. 2018a. "Possession of Smartphone in Eastern Europe". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Euromonitor International. 2018b. "Inflation". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Euromonitor International. 2018c. "Possession of Cable TV and Satellite TV in USA". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Euromonitor International. 2018d. "Possession of Cable TV and Satellite TV in Western Europe". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Euromonitor International. 2018e. "Possession of Cable TV and Satellite TV in Eastern Europe". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Euromonitor International. 2018f. "Possession of Cable TV and Satellite TV in Latin America". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>

- Euromonitor International. 2018g. "Possession of Cable TV and Satellite TV in Asia Pacific". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Euromonitor International. 2018h. "Possession of Cable TV and Satellite TV in Middle East and Africa". Retrieved from Passport Database. <https://go.euromonitor.com/passport.html>
- Feldman, Dana. 2018. "Netflix: Here Are The Top 10 Foreign Language TV Series And 12 New Shows Coming". Last accessed December 27. <https://www.forbes.com/sites/danafeldman/2018/03/07/netflix-here-are-the-top-10-foreign-language-tv-series-and-12-new-shows-coming-soon/#38c296051787>
- Fingas, Jon. 2018. "Netflix deal provides a much-needed boost in the middle east". Last accessed December 19. <https://www.engadget.com/2018/02/18/netflix-osn-deal-in-middle-east/?guccounter=2>
- Fung, Brian. 2017. "Meet the sometime-streamer: TV watchers who sign up for one show – then cancel". Last accessed December 19. https://www.washingtonpost.com/news/the-switch/wp/2017/08/28/meet-the-sometime-streamer-tv-watchers-who-sign-up-for-one-show-then-cancel/?noredirect=on&utm_term=.9fa3b82bd0e1
- Gaus, Annie. 2018. "Netflix Is Testing a Cheaper, Mobile-Only Plan in Some Countries". Bloomberg (Originally published by TheStreet). Last accessed December 19.
- GlobalData. 2018. "Over-the-top Video in Latin America: Content and Pricing Strategies". Last accessed December 27. <https://www.giiresearch.com/report/gd625198-over-top-video-latin-america-content-pricing.html>
- Haslam, Karen. 2018. "Apple streaming Service Release Date & Apple TV Subscription Rumours". Last accessed December 19. <https://www.macworld.co.uk/news/apple/apple-streaming-service-3610603/>
- HBO Official Website. 2018. Last accessed December 19. <https://www.hbo.com>
- Henderson, Steven. 2016. "Spending Habits by Generation". U.S. Department of Labor Blog. Last accessed December 19. <https://blog.dol.gov/2016/11/03/spending-habits-by-generation>
- Hulu Official Website. 2018. Last accessed December 19. <https://www.hulu.com/welcome>
- Investing.com. 2018. "United States 10-Year Bond Yield". Last accessed November 27. <https://www.investing.com/rates-bonds/u.s.-10-year-bond-yield>
- Investopedia. 2017a. "Return on Assets – ROA". Last accessed December 19. <https://www.investopedia.com/terms/r/returnonassets.asp>
- Investopedia. 2017b. "Price-Earnings Ratio – P/E Ratio". Last accessed December 19. <https://www.investopedia.com/terms/p/price-earningsratio.asp>
- Investopedia. 2017c. "Solvency Ratio". Last accessed December 19. <https://www.investopedia.com/terms/s/solvencyratio.asp>
- Investopedia. 2018a. "Liquidity Ratios". Last accessed December 19. <https://www.investopedia.com/terms/l/liquidityratios.asp>
- Investopedia. 2018b. "Quick Ratio". Last accessed December 19. <https://www.investopedia.com/terms/q/quickratio.asp>
- Investopedia. 2018c. "Operating Margin". Last accessed December 19. <https://www.investopedia.com/terms/o/operatingmargin.asp>

- Jackson, Sarah. 2018. "The World of Streaming TV Is a Crowded One". Last accessed December 19. <https://www.inc.com/sarah-jackson/best-tv-streaming-services.html>
- Joshi, Hemant. 2015. "Digital Media: Rise of On-demand Content". Deloitte. <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/technology-media-telecommunications/in-tmt-rise-of-on-demand-content.pdf>
- Katz, Brandon. 2018. "Is TV Giving Up? All Major Networks are Expected to Offer Streaming Services by 2022". Last accessed December 19. <https://observer.com/2018/03/netflix-amazon-hulu-hbo-cbs-disney-fox-streaming-wars/>
- Kim et al. 2016. "Willingness to pay for over-the-top services in China and Korea". Telecommunication Policy 41.
- Koller, Tim et al. 2010. "Valuation, Measuring and Managing the Value of Companies". John Wiley & Sons, Inc.
- Laport, Nicole. 2017. "Can Netflix Slay the Mouse?". Fast Company, No. 220
- Levy, Adam. 2016. "Viewers Love Netflix Originals More Than HBO's". Last accessed December 19. <https://www.fool.com/investing/general/2016/04/16/viewers-love-netflix-originals-more-than-hbos.aspx>
- Lovely. 2018. "Netflix's Original Content Strategy is Paying Off". Last accessed December 19. <https://www.fool.com/investing/2018/11/13/netflixs-original-content-strategy-is-paying-off.aspx>
- Lynch, John. 2018. "All 82 of Netflix's notable original shows, ranked from worst to best". Business Insider. Last accessed December 19. <https://www.businessinsider.com/best-netflix-original-shows-ranked-2017-11>
- Marshall, Rick. 2018. "Netflix paid \$100M to keep 'Friends', but viewers may pay the highest price. Last accessed December 19. <https://www.digitaltrends.com/home-theater/netflix-friends-100-million-streaming-tv/>
- McKinsey&Company. 2016. "Global Media Report 2016"
https://www.mckinsey.com/~media/McKinsey/Industries/Media%20and%20Entertainment/Our%20Insights/Global%20Media%20Report%202016/GMO%20Report_2016_Industry%20overview_v3.ashx?fbclid=IwAR1M18-vfyadPIpXqKjs4Kim15wnYJBbLnOVxfIVakZYGQfV7IBynYU_QY
- Mercer, David. 2018. "250 Million Households Now Pay for Streaming Video Services, Says Strategy Analytics". Last accessed December 27. <https://www.strategyanalytics.com/strategy-analytics/news/strategy-analytics-press-releases/2018/02/28/250-million-households-now-pay-for-streaming-video-services-says-strategy-analytics>
- Moody's. 2018. Last accessed December 19. <https://www.moody.com>
- Netflix Annual Report. 2017. https://s22.q4cdn.com/959853165/files/doc_financials/annual_reports/0001065280-18-000069.pdf
- Netflix Letter to Shareholders Q1. 2018. https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2018/q1/FINAL-Q1-18-Shareholder-Letter.pdf

- Netflix Letter to Shareholders Q2. 2018.
https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2018/q2/FINAL-Q2-18-Shareholder-Letter.pdf
- Netflix Letter to Shareholders Q3. 2018.
https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2018/q3/FINAL-Q3-18-Shareholder-Letter.pdf
- Netflix Media Center. 2018. "About Netflix". Last accessed December 19.
<https://media.netflix.com/en/about-netflix>
- Netflix Official Website. 2018a. "Long-Term View". Last accessed December 19.
<https://www.netflixinvestor.com/ir-overview/long-term-view/default.aspx>
- Netflix Official Website. 2018b. "Top Investor Questions". Last accessed December 19.
<https://www.netflixinvestor.com/ir-overview/top-investor-questions/default.aspx>
- Netflix Official Website. 2018c. "Stock Quote". Last accessed November 18.
<https://www.netflixinvestor.com/stock-information/stock-quote/default.aspx>
- Netflix Press Release. 2018. "Netflix Announces Proposed \$2.0 Billion Offering of Senior Notes".
<https://ir.netflix.com/investor-news-and-events/financial-releases/press-release-details/2018/Netflix-Announces-Proposed-20-Billion-Offering-of-Senior-Notes/default.aspx?fbclid=IwAR1NDVzDvyE0JhS5OEldqjXJ7ZvS7TRqoLSE2SMqvrzeSxvB65Eo2CTK7Q>
- Netflix Second Quarter Earnings Call. 2016.
https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2016/q2/NFLX-Transcript-2016-07-18T21_00.pdf
- Netflix Third Quarter Earnings Call. 2017.
https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2017/q3/NFLX-USQ_Transcript_2017-10-16.pdf
- Netflix Third Quarter Earnings Call. 2018.
https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2018/q3/NFLX-USQ_Transcript_2018-10-16.pdf
- Nield, David. 2018. "How to Download Everything from Your Favorite Streaming Services". Last accessed December 19. <https://gizmodo.com/how-to-download-everything-from-your-favorite-streaming-1827504636>
- Oaks, Rachel. 2017. "Netflix: What the World is watching". Last accessed December 19.
<https://www.highspeedinternet.com/resources/netflix-what-the-world-is-watching/>
- Palladino, Valentina. 2018. "Walmart may launch a video streaming to battle Netflix, Amazon". Last accessed December 19. <https://arstechnica.com/information-technology/2018/07/walmart-may-launch-a-video-streaming-service-to-battle-netflix-amazon/>
- Passport. 2018a. "Digital Landscape in Latin America"
- Passport. 2018b. "Digital Landscape in Middle East and Africa"

- Pham, Sherisse. 2017. "Netflix finally finds a way into China". Last accessed December 19. <https://money.cnn.com/2017/04/26/technology/netflix-china-baidu-iqiyi/>
- Plaugic, Lizzie. 2018. "Amazon's US audience for Prime Video is reportedly around 26 million". Last accessed December 19. <https://www.theverge.com/2018/3/15/17123690/amazon-prime-video-audience-numbers-us>
- Powell, Dominic. 2017. "One in Three Australians Now Have a Netflix Account: Who Will Win the Streaming Race?". Last accessed December 27. <https://www.smartcompany.com.au/technology/one-in-three-australians-now-have-a-netflix-account-who-will-win-the-streaming-race/>
- Pulig, Andrew. 2018. "See what Disney will Acquire in the Fox Merger". Last accessed December 19. <https://hypebeast.com/2018/7/what-disney-acquire-fox-merger>
- PwC. 2017a. "PwC Entertainment and Media Outlook 2017-2021"
- PwC. 2017b. "The long view: how will the global economic order change by 2050?"
- Roshan. 2018. "Amazon Prime Video beats Netflix in Germany, India and Japan". Last accessed December 19. <https://www.muvi.com/industry-updates/amazon-prime-video-beats-netflix-germany-india-japan.html>
- Russell, Jon. 2016. "Netflix's overseas problem: still too expensive and still not enough content". Last accessed December 5. <https://techcrunch.com/2016/07/19/netflixs-overseas-problem-still-too-expensive-and-still-not-enough-content/?guccounter=1>
- Russell, Jon. 2018. "Netflix is testing a mobile-only subscription to make its service more affordable". Last accessed December 5. <https://techcrunch.com/2018/11/14/netflix-is-testing-a-mobile-only-subscription-to-make-its-service-more-affordable/>
- Sallomi, Paul et al. 2018. "Technology, Media and Telecommunications Predictions 2018 – Southeast Asia Edition". Deloitte. <https://www2.deloitte.com/content/dam/Deloitte/sg/Documents/technology-media-telecommunications/sea-tmt-predictions-2018.pdf>
- Sarkar, Samit. 2018. "What Disney's streaming service means for Netflix subscribers". Last accessed December 19. <https://www.polygon.com/2018/2/7/16982030/disney-leaving-netflix-marvel-lucasfilm-pixar-streaming-rights>
- Scott, Mark. 2014. "Netflix Faces Hurdles, Country by Country, in Bid to Expand in Europe". The New York Times. Last accessed December 19. <https://www.nytimes.com/2014/05/22/business/international/netflix-plans-to-expand-in-europe.html>
- Shaw, Lucas. 2018. "Netflix to Test Lower-Price Plans as It Seeks More Asia Users". Bloomberg. Last accessed December 5. <https://www.bloomberg.com/news/articles/2018-11-12/netflix-to-test-lower-price-plans-as-it-seeks-more-asian-users>
- Sommer, Jeff. 2018. "Netflix's Audience is Multiplying. But so is its Debt". The New York Times. Last accessed December 19. <https://www.nytimes.com/2018/10/26/business/netflix-audience-stock-debt.html>

- Sorrentino, Mike and Joan Solsman. 2018. "Disney+ streaming service: Release date, shows and movies to expect and more". Last accessed December 19. <https://www.cnet.com/how-to/disney-plus-streaming-service-name-release-date-shows-movies-to-expect/>
- Spangler, Todd. 2018a. "'13 Reasons Why' Season 2 Premiere Drew 6 Million U.S. Viewers in First Three Days". Last accessed December 19. <https://variety.com/2018/digital/news/13-reasons-why-season-2-ratings-premiere-nielsen-1202825235/>
- Spangler, Todd. 2018b. "Netflix Original Series Viewing Climbs". Last accessed December 19. <https://variety.com/2018/digital/news/netflix-original-series-licensed-viewing-friends-the-office-1203085230/>
- Spangler, Todd. 2018c. "Netflix Eyeing Total of 700 Original Series in 2018". Last accessed December 19. <https://variety.com/2018/digital/news/netflix-700-original-series-2018-1202711940/>
- Spangler, Todd. 2018d. "Netflix Content Chief Says 85% of New Spending Is on Originals". Last accessed December 19. <https://variety.com/2018/digital/news/netflix-original-spending-85-percent-1202809623/>
- Statista. 2017. "Media Piracy – Statistics & Facts". Last accessed November 27. https://www.statista.com/topics/3493/media-piracy/?fbclid=IwAR3CxRb8w3vMc0sXAA4O_HuUzhO_zAdLVOz-m_2LmbaRnNbdZ0fcQQK8hYk
- Statista. 2018a. "Subscription Video on Demand Market in the U.S."
- Statista. 2018b. "Digital Media Report 2018"
- Statista. 2018c. "Number of smartphone users in China from 2013 to 2022 (in millions)". Last accessed December 19. <https://www.statista.com/statistics/467160/forecast-of-smartphone-users-in-china/>
- Statista. 2018d. "Amazon".
- Szalai, Georg. 2014. "Netflix Spreads Through Europe... Then Where Next?". Hollywood Reporter Vol.410, No.34.
- The Economist. 2018. "Netflix is moving television beyond time-slots and national markets". Last accessed December 19. <https://www.economist.com/briefing/2018/06/30/netflix-is-moving-television-beyond-time-slots-and-national-markets>
- U.S. Department of Commerce. 2017. "2017 Top Markets Report Media and Entertainment: Sector Snapshot".
- United Nations. 2018. "World Economic Situation and Prospects 2018".
- Venable, Nick. 2018. "How much money U.S. Consumers Apparently Spend on Streaming Services per Month". Last accessed December 19. <https://www.cinemablend.com/television/2389991/how-much-money-us-consumers-apparently-spend-on-streaming-services-per-month>
- Waniata, Ryan. 2018. "There are too many streaming options, and it's only getting worse". Last accessed December 19. <https://www.digitaltrends.com/movies/too-many-streaming-services-netflix-amazon-disney-att/>

- Weimer, Jeroen et al. 2018. "Equity Market Risk Premium – Research Summary". KPMG. <https://assets.kpmg.com/content/dam/kpmg/nl/pdf/2018/advisory/equity-market-risk-premium-research-summary.pdf>
- White, Peter. 2018. "Netflix Orders "Jinn", Debut Middle Eastern Original Series To Launch in 2019". Last accessed December 19. <https://deadline.com/2018/02/netflix-orders-jinn-debut-middle-eastern-original-series-to-launch-in-2019-1202303176/>
- Yahoo Finance. 2018. "Netflix, Inc. (NFLX) – Statistics". Last accessed November 18. <https://finance.yahoo.com/quote/NFLX/key-statistics?p=NFLX>
- Yeoh, Angelin. 2018. "Netflix Testing RM17 mobile-only plan". The Star Online. Last accessed December 5. <https://www.thestar.com.my/tech/tech-news/2018/11/14/netflix-introduces-rm17-mobile-only-plan/>

Appendixes

Appendix 1 – Financial Statements

(in thousands)												
Income Statement	2017	2018E	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P
Total Paid Memberships	113,974	141,139	158,833	183,830	210,716	238,647	264,983	286,442	305,151	321,546	337,267	353,064
Domestic Streaming	52,810	58,384	62,948	70,361	76,162	80,072	83,005	85,350	87,541	89,758	91,902	94,068
International Streaming	57,834	80,066	92,766	111,843	133,344	157,705	181,377	200,695	217,362	231,641	245,285	258,956
Domestic DVD	3,330	2,689	2,119	1,626	1,210	870	601	397	249	147	81	41
Total Revenues	\$ 11,692,713	\$ 15,837,149	\$ 18,333,412	\$ 23,672,299	\$ 27,120,389	\$ 34,562,076	\$ 38,505,562	\$ 41,950,500	\$ 46,685,080	\$ 49,278,228	\$ 51,672,028	\$ 54,022,466
Domestic Streaming	\$ 6,153,025	\$ 7,647,584	\$ 8,593,627	\$ 10,569,117	\$ 11,522,500	\$ 13,743,895	\$ 14,337,427	\$ 14,796,457	\$ 17,016,780	\$ 17,450,440	\$ 17,878,618	\$ 18,302,479
International Streaming	\$ 5,089,191	\$ 7,827,104	\$ 9,481,128	\$ 12,904,710	\$ 15,450,179	\$ 20,711,993	\$ 24,094,757	\$ 27,105,586	\$ 29,637,931	\$ 31,809,878	\$ 33,783,577	\$ 35,715,028
Domestic DVD	\$ 450,497	\$ 362,462	\$ 258,657	\$ 198,471	\$ 147,711	\$ 106,188	\$ 73,378	\$ 48,458	\$ 30,369	\$ 17,909	\$ 9,833	\$ 4,959
Cost of Revenues	\$ 7,659,666	\$ 9,439,908	\$ 11,611,087	\$ 13,584,972	\$ 14,943,469	\$ 15,690,642	\$ 16,318,268	\$ 16,644,633	\$ 16,977,526	\$ 17,317,076	\$ 17,663,418	\$ 18,016,686
Marketing Expenses	\$ 1,278,022	\$ 2,151,852	\$ 2,491,029	\$ 3,216,443	\$ 3,064,604	\$ 2,937,776	\$ 2,887,917	\$ 2,831,659	\$ 2,801,105	\$ 2,808,859	\$ 2,790,290	\$ 2,809,168
Technology and Development	\$ 1,052,778	\$ 1,333,317	\$ 1,466,673	\$ 1,893,784	\$ 2,169,631	\$ 2,695,842	\$ 2,984,181	\$ 3,188,238	\$ 3,501,381	\$ 3,695,867	\$ 3,875,402	\$ 4,051,685
General and Administrative	\$ 791,657	\$ 1,173,543	\$ 1,084,830	\$ 1,400,745	\$ 1,604,776	\$ 2,045,118	\$ 2,278,463	\$ 2,482,308	\$ 2,762,464	\$ 2,915,907	\$ 3,057,554	\$ 3,196,634
Depreciation	\$ 71,911	\$ 83,256	\$ 84,833	\$ 109,537	\$ 125,492	\$ 159,927	\$ 178,174	\$ 194,115	\$ 216,023	\$ 228,022	\$ 239,099	\$ 249,975
Operating Income	\$ 838,679	\$ 1,422,694	\$ 1,594,960	\$ 3,466,818	\$ 5,212,417	\$ 11,032,770	\$ 13,858,559	\$ 16,609,547	\$ 20,426,581	\$ 22,312,496	\$ 24,046,266	\$ 25,698,318
NOPLAT	\$ 816,620	\$ 1,330,354	\$ 1,263,320	\$ 2,751,719	\$ 4,139,723	\$ 8,767,749	\$ 11,014,660	\$ 13,202,096	\$ 16,237,192	\$ 17,736,768	\$ 19,115,366	\$ 20,428,987

(in thousands)												
Balance Sheet	2017	2018E	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P
Operating Assets												
Cash and cash equivalents	\$ 233,854	\$ 84,593	\$ 366,668	\$ 473,446	\$ 542,408	\$ 691,242	\$ 770,111	\$ 839,010	\$ 933,702	\$ 985,565	\$ 1,033,441	\$ 1,080,449
Current Content Assets, net	\$ 4,310,934	\$ 5,736,103	\$ 7,055,407	\$ 8,096,224	\$ 8,731,222	\$ 9,167,783	\$ 9,534,495	\$ 9,725,184	\$ 9,919,688	\$ 10,118,082	\$ 10,320,444	\$ 10,526,852
Other current assets	\$ 536,245	\$ 693,955	\$ 803,337	\$ 1,037,277	\$ 1,188,366	\$ 1,514,448	\$ 1,687,244	\$ 1,838,195	\$ 2,045,656	\$ 2,159,283	\$ 2,264,175	\$ 2,367,167
Non-current content assets, net	\$ 10,371,055	\$ 15,419,709	\$ 18,966,243	\$ 22,986,927	\$ 25,320,544	\$ 26,586,571	\$ 27,650,034	\$ 28,203,035	\$ 28,767,095	\$ 29,342,437	\$ 29,929,286	\$ 30,527,872
Other non-current assets	\$ 652,309	\$ 693,955	\$ 803,337	\$ 1,037,277	\$ 1,188,366	\$ 1,514,448	\$ 1,687,244	\$ 1,838,195	\$ 2,045,656	\$ 2,159,283	\$ 2,264,175	\$ 2,367,167
Property and equipment, net	\$ 319,404	\$ 405,733	\$ 446,490	\$ 576,512	\$ 660,487	\$ 841,721	\$ 937,760	\$ 1,021,657	\$ 1,136,969	\$ 1,200,116	\$ 1,258,414	\$ 1,315,657
Total Operating Assets	\$ 16,423,801	\$ 23,153,025	\$ 28,441,482	\$ 34,207,664	\$ 37,631,394	\$ 40,316,212	\$ 42,266,888	\$ 43,465,277	\$ 44,848,760	\$ 45,964,766	\$ 47,069,934	\$ 48,185,164
Operating Liabilities												
Current content liabilities	\$ 4,173,041	\$ 5,304,963	\$ 6,340,092	\$ 7,201,442	\$ 7,683,475	\$ 8,067,649	\$ 8,390,355	\$ 8,558,162	\$ 8,729,326	\$ 8,903,912	\$ 9,081,990	\$ 9,263,630
Accounts Payable	\$ 359,555	\$ 495,265	\$ 632,917	\$ 817,230	\$ 936,267	\$ 1,193,173	\$ 1,329,313	\$ 1,448,241	\$ 1,611,691	\$ 1,701,214	\$ 1,783,854	\$ 1,864,997
Accrued Expenses	\$ 315,094	\$ 405,774	\$ 427,999	\$ 552,637	\$ 633,134	\$ 806,862	\$ 898,924	\$ 979,347	\$ 1,089,877	\$ 1,150,415	\$ 1,206,299	\$ 1,261,171
Deferred Revenue	\$ 618,622	\$ 776,241	\$ 942,757	\$ 1,217,298	\$ 1,394,608	\$ 1,777,281	\$ 1,980,067	\$ 2,157,215	\$ 2,400,681	\$ 2,534,028	\$ 2,657,124	\$ 2,777,991
Non-current content liabilities	\$ 3,329,796	\$ 4,132,896	\$ 4,836,264	\$ 5,369,206	\$ 5,587,982	\$ 5,867,381	\$ 6,102,076	\$ 6,224,118	\$ 6,348,600	\$ 6,475,572	\$ 6,605,084	\$ 6,737,186
Other non-current liabilities	\$ 135,246	\$ 138,208	\$ 159,993	\$ 206,584	\$ 236,675	\$ 301,617	\$ 336,032	\$ 366,095	\$ 407,413	\$ 430,043	\$ 450,933	\$ 471,445
Total Operating Liabilities	\$ 8,931,354	\$ 11,250,411	\$ 13,340,021	\$ 15,364,397	\$ 16,472,142	\$ 18,013,965	\$ 19,036,767	\$ 19,733,179	\$ 20,587,589	\$ 21,195,184	\$ 21,785,285	\$ 22,376,419
Invested Capital Core Business	\$ 7,492,447	\$ 11,902,614	\$ 15,101,460	\$ 18,843,266	\$ 21,159,252	\$ 22,302,247	\$ 23,230,121	\$ 23,732,098	\$ 24,261,171	\$ 24,769,581	\$ 25,284,650	\$ 25,808,745
Financial Assets												
Long-term debt	\$ (6,499,432)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)	\$ (8,336,586)
Newly issued Debt	\$ -	\$ (1,956,134)	\$ (4,873,716)	\$ (7,142,626)	\$ (6,144,808)	\$ (302,560)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equity	\$ 3,581,956	\$ 5,042,994	\$ 6,282,556	\$ 9,034,275	\$ 13,173,998	\$ 21,941,747	\$ 32,956,407	\$ 46,158,503	\$ 62,395,695	\$ 80,132,463	\$ 99,247,829	\$ 119,676,816

(in thousands)												
FCF	2017	2018E	2019P	2020P	2021P	2022P	2023P	2024P	2025P	2026P	2027P	2028P
NOPLAT	\$ 816,620	\$ 1,330,354	\$ 1,263,320	\$ 2,751,719	\$ 4,139,723	\$ 8,767,749	\$ 11,014,660	\$ 13,202,096	\$ 16,237,192	\$ 17,736,768	\$ 19,115,366	\$ 20,428,987
Depreciation	\$ 71,911	\$ 83,256	\$ 84,833	\$ 109,537	\$ 125,492	\$ 159,927	\$ 178,174	\$ 194,115	\$ 216,023	\$ 228,022	\$ 239,099	\$ 249,975
Amortization	\$ 6,258,474	\$ 7,718,668	\$ 9,471,339	\$ 11,067,632	\$ 12,166,263	\$ 12,769,663	\$ 13,277,164	\$ 13,540,576	\$ 13,809,923	\$ 14,085,114	\$ 14,366,123	\$ 14,652,969
Operating Cash Flow	\$ 7,147,005	\$ 9,132,278	\$ 10,819,492	\$ 13,928,889	\$ 16,431,479	\$ 21,697,338	\$ 24,469,999	\$ 26,936,787	\$ 30,263,137	\$ 32,049,904	\$ 33,720,588	\$ 35,331,931
Invested Capital - Operating Assets	\$ 7,492,447	\$ 11,902,614	\$ 15,101,460	\$ 18,843,266	\$ 21,159,252	\$ 22,302,247	\$ 23,230,121	\$ 23,732,098	\$ 24,261,171	\$ 24,769,581	\$ 25,284,650	\$ 25,808,745
Change in Net Invested Capital	\$ (9,335,890)	\$ (12,212,091)	\$ (12,755,018)	\$ (14,918,976)	\$ (14,607,741)	\$ (14,072,585)	\$ (14,383,212)	\$ (14,236,668)	\$ (14,555,019)	\$ (14,821,546)	\$ (15,120,290)	\$ (15,427,039)
Investing Cash Flow	\$ (9,335,890)	\$ (12,212,091)	\$ (12,755,018)	\$ (14,918,976)	\$ (14,607,741)	\$ (14,072,585)	\$ (14,383,212)	\$ (14,236,668)	\$ (14,555,019)	\$ (14,821,546)	\$ (15,120,290)	\$ (15,427,039)
Core Business Free Cash Flow	\$ (2,188,885)	\$ (3,079,813)	\$ (1,935,526)	\$ (990,087)	\$ 1,823,738	\$ 7,624,753	\$ 10,086,787	\$ 12,700,119	\$ 15,708,118	\$ 17,228,358	\$ 18,600,298	\$ 19,904,892

Appendix 2 – Disclosures and Disclaimers

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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Appendix 3 –Maria Inês Ribeiro (23996)

Digital Media Landscape: The More the Merrier?

The New Business Model

The already-disruptive modern media landscape is dramatically changing. The streaming video-on-demand sector is becoming increasingly competitive and fragmented; as consumers are “cutting the cord”, traditional media companies are joining the race by launching their own streaming services. In this sense, companies have been integrating vertically: industry players that used to focus on distribution are becoming content producers, and former producers are launching their own platforms, mimicking Netflix’s advantageous business model.

Disney is a recent example of this phenomenon: the company announced it will launch its own streaming service (Disney+) in late 2019. The service will include all Disney brand catalogue as well as other content owned by the company, such as Pixar, Marvel and Lucasfilm (Star Wars’ home company) (Sorrentino and Solsman, 2018). Following this, Disney promptly announced it will no longer license content to Netflix; it is already withdrawing all Marvel and Star Wars productions from the streaming giant (Laport, 2017). Further, the company stated it will price the new service “substantially below where Netflix is” (Walt Disney 4Q Earnings Call 2017). Besides, Disney recently acquired 21st century FOX, making it now the owner of most of Fox’s intellectual property, including iconic cartoons like The Simpsons, and popular sitcoms such as Modern Family. As such, Fox content is being removed from Netflix as well.

Another noteworthy example is the one of AT&T. Formerly focused on providing telecommunication and cable TV services, the conglomerate vertically merged with Time Warner, now called WarnerMedia (AT&T Official Website, 2018). This controversial acquisition means that AT&T now owns the Warner Bros studio (home of DC Universe movies and popular franchises like Harry Potter), and subsidiaries such as CNN and HBO. Following

this, WarnerMedia announced it will launch its own streaming service by the end of 2019. Also, AT&T is already pulling HBO content from rival platforms (Waniata, 2018).

The list goes on: Amazon is producing original content for its Prime service and YouTube is going down the same path. Apple is catching-up as well: its brand-new streaming service will launch in 2019, offering both licensed and original content. Though it is difficult to predict the quality of the original programming, the company is investing billions on production, and hiring prominent professionals to integrate its creative team (Haslam, 2018). Even Walmart is trying to get a piece of the action, with plans to undercut the price of the competition (Palladino, 2018). Studies indicate that by 2022 every major network will have launched its own streaming platform (Katz, 2018).

Less is More

Despite Netflix's dominance, a variety of streaming services has always coexisted in the industry. Until now, from a user point of view, this has worked out just fine: consumers can subscribe to one or two streaming services and get access to virtually all the content they desire (Venable, 2018). And, by doing so, they still pay less than a traditional cable subscription. However, as competitors emerge and companies strive for exclusivity, we are moving towards a market where each platform will carry its own content and not much else (Waniata, 2018). The streaming world is being stripped of the simplicity that made it convenient and enticing to the digital consumer in the first place. As the "all-in-one" model fades, the value of each streaming service weakens. And consumers are the ones suffering the most. With too many choices, users will end up with multiple subscriptions, spending a lot of money just to watch a handful of preferred shows in each platform (Cruz, 2018). But didn't consumers shift away from cable to avoid that issue in the first place?

Consumers have a limited disposable income. Paying for one or two streaming services may be reasonable, but more becomes unsustainable. Considering this, as the streaming market

becomes oversaturated, many users will limit themselves to the options with better value-for-money and either (1) refrain from watching other content; (2) jump between platforms to catch up on the latest shows; (3) access the remaining content through piracy (Fung, 2017). In fact, after a reduction in recent years, piracy is soaring again, precisely because content is being partitioned and consumers cannot afford multiple subscriptions (Bode, 2018).

What does this mean for Netflix?

Thus far, Netflix has been able to uphold its position as a market leader, powered by assets such as a strong and sizeable content library, and an enduring reputation as a high-quality entertainment platform. Besides, not only it has become more self-reliant, but some of its original content is gaining a lot of traction among consumers.

However, Netflix's platform is mostly composed of licensed content. The portion of original content is bound to increase further, especially given how the company is pumping out new productions at an impressive rate. Back in 2016, the company shared its goal of attaining a 50% share of original content (Netflix 2Q Earnings Call, 2016). Nonetheless, consumers still favor licensed content over in-house productions: estimates from 2018 show that licensed content accounted for 63% of Netflix's streams. In fact, the popular sitcom "The Office" was the most-watched series in Netflix in 2018, and other licensed shows such as "Friends" and "Grey's Anatomy" also made it on the top five list. Moreover, Disney content accounts for approximately 12% of consistent Netflix viewership (Spangler, 2018c).

Bearing this in mind, despite its strategy, Netflix may not be immune to competitive pressure. As players fight for exclusivity and consumers cannot afford every streaming service, it all comes down to whether Netflix's originals will still be enough to differentiate it from the competitors flooding the market. This is a possibility, but there are only so many "must-watch" titles the company can air every month to keep customers engaged. On the other hand, these established competitors can get an edge by taking back the rights of flagship shows while they

invest in new, original content. In fact, negative repercussions for Netflix can already be observed. In 2018, Netflix announced it would no longer stream the beloved show “Friends” from 2019 onwards. So many customers expressed outrage over this news that Netflix ended up paying \$100 Million (\$70 Million more than before) to retain the show one more year. This evidences how licensed content still plays an important role for Netflix. Also, the company was not able to guarantee the streaming rights for the show after 2019 (Marshall, 2018).

Additionally, as competitors integrate vertically and become both content creators and distributors, they can access consumer analytics and viewing patterns and use that knowledge as an asset in future content creation (Deloitte, 2018b). Until now, this constituted a competitive advantage for Netflix and helped it becoming a content powerhouse. In years to come, this may no longer be the case: with new access to data, competitors will benefit from economies of learning, and understand how to monetize content as well as Netflix. What makes this more unsettling is that big media companies such as Amazon, Apple, Disney and AT&T have strong balance sheets and robust capital structures, thus they can sustain large investments and losses to grow their platforms and improve content. On the other hand, Netflix is dependent on its ability to meet growth and profit expectations. If this does not happen, its virtuous circle is broken: if revenue levels do not suffice, there is a limit on how much it can spend on content; and less content investment, the backbone of Netflix’s strategy, makes the company even more vulnerable to losing market share (Alsin, 2018). All in all, content drives subscriptions. If Netflix’s competitive advantage goes out the window, so may consumers.

Taking all into account, a scenario where Netflix is not necessarily the only major player shall be considered. Firstly, Netflix’s pricing power is bound to diminish. With cheaper alternatives with equally engaging catalogues in the market, a rise in prices would tempt consumers to jump ship. Therefore, we can assume a constant average price of \$11.4 and \$8.95 for its domestic and international segment, respectively. Secondly, since most potential big

competitors will launch their streaming services in 2019, we can assume that Netflix’s penetration rate will slightly slowdown in 2020, but not that significantly because the company is still investing heavily in marketing and new original shows, and competitors are still optimizing their platforms and raising awareness about their services. As so, we can expect that from 2022, Netflix’s penetration rate will start suffering more, when most ongoing contracts with content suppliers will have expired and these new services will have gathered consumers and reputation (especially since most come from well-established media companies). As so, from this year onwards, some consumers may prefer to subscribe to other platforms and no longer access Netflix’s content, or simply access it through piracy. Finally, since the company’s growth is slowing down, its content investment may decrease, which will create a snowball effect and slow growth even further. This would correspond to a Netflix penetration rate of 56% in 2028, leaving a penetration of 36% for remaining competitors (with a 91% rate for the total streaming market). The same logic applies to the international segment, albeit in later years, since competitors will take action first in the U.S., and then globally. In Canada and Western Europe, this impact will be similar to the one in the United States. However, in the more emerging regions, the negative impact will not be as strong, since Netflix will have the advantage of a wider catalog of local-language programming. This would result in Revenues of \$29.5 Billion in 2028 (an increase of approximately 90% since 2018). Free Cash Flow would turn positive by 2022, when ROIC reaches approximately 9% and operating margins correspond to 13%. Equity Value for the company would be \$83 Billion, which leads to a per share price of \$190.34, 52% below the base case price.

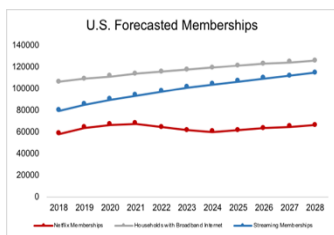


Figure 53: U.S. Forecasted Memberships

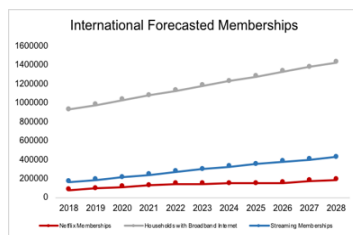


Figure 54: Total International Forecasted Memberships

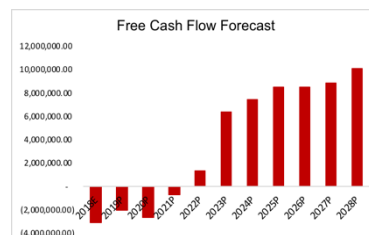


Figure 55: Forecasted Free Cash Flow

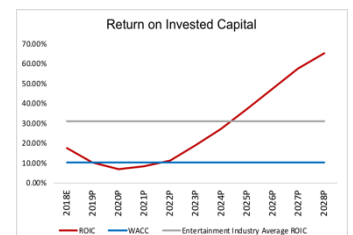


Figure 56: Forecasted ROIC Evolution

Appendix 4 – Catarina Borges Oliveira (23971)

Emerging through Submersion (of prices)

Leading the internet entertainment world, Netflix has been growing its subscriber base non-stop. Since it became global in 2016, the company has added the impressive number of 42 million new total members (Netflix Letter to shareholders Q3, 2018) to its network and it is far from reaching full potential. With operations in over 190 countries, this number includes users from several markets. However, not all regions have shown similar growth or penetration rates (Netflix Media Center, 2018) (Statista, 2018a). While in the United States and Canada penetration rates are currently around 55% and 44% (considering that total market corresponds to the number of households who have access to broadband internet), in the Asia Pacific region growth has been slow, penetration is around 2% and Netflix has yet to amass 2 million members in any country of this region (Statista, 2018a) (Shaw, 2018).

Recent news indicate that Netflix may be trying a new lower-priced version in some markets to attract new layers of consumers and boost sales (Shaw, 2018). This appendix will analyse the possibility of this becoming a reality for some markets, in the near future, and how it will affect Netflix's operations, profitability and ultimately the target price.

Testing Alternatives

Netflix has never committed to lowering prices nor it did so in the past. On the contrary, in major markets it has either maintained or raised prices to support new content additions (Shaw, 2018). However, this past November, Netflix's CEO declared that the company will test a cheaper version in some markets – a fourth tier with different features (Shaw, 2018).

Subsequent news, by Malaysian news website The Star, suggest that this new option consists of a mobile-only plan and that it is already trialling in the country (Yeoh, 2018) (Gaus, 2018). This alternative version of the service is priced at RM17 per month, which is around \$4

and nearly half the price that the company exercises in the country for the basic package, which retails for approximately \$7.90 (Russell, 2018).

Although being just a testing alternative, that may not even be rolled out to other countries for now, this change makes sense for Netflix as it tries for global dominance (Gaus, 2018). Netflix has stated that it is seeking growth in regions where per-capita income is significantly lower (Shaw, 2018) and Asia, with hundreds of millions potential video consumers (Armstrong, 2018), looks like a fertile territory for Netflix to capture more users.

The Potential in Asia

Despite being considered a cheap alternative compared with the cost of Pay TV in the U.S. and others markets-like, for some the situation is very different. The Asia Pacific region, in particular, is a good example where the typical consumer is more price sensitive (Shaw, 2018). Malaysia has one of the most advanced telecom networks in the developing world and one of the highest mobile penetration in Asia (Alomari and Sumari, 2011), which makes it a good target market for a trial of this type that intends to grab consumers with such characteristics, and one where the model is likely to continue.

In India, for instance, improved infrastructures have provided the country with better internet access, which led to a fast increase in the number of internet users (Joshi, 2015). The average price of smartphones is expected to fall which will positively influence the proliferation of these devices even more (Joshi, 2015). In addition, mobile data price per MB has fallen significantly and, as a result, accessing the internet using a smartphone has increase to a level that has already surpassed the desktop internet traffic (Joshi, 2015). Consumers' willingness to pay for content is still, to some extent, obstructed by the convenience of content piracy (Joshi, 2015). Nonetheless, there are signs of a shift in consumers' attitude in this matter (Joshi, 2015) and a deal with an adjusted pricing strategy would certainly grab consumers' attention.

Malaysia and India represent two promising markets in Asia, but they are not the only ones with potential to become Netflix's new stream of revenue. For example, in Singapore, Pay TV lost 48 thousand subscribers in 2017 (Boulay, 2018), meaning that consumers in the country are beginning to admit streaming as a valuable option. Thailand and Indonesia are other examples, that seem to be following the same trends (Digital TV Research, 2018) (Sallomi, et al. 2018) and where the company could benefit from the implementation of lower-priced packages.

A look into other continents

Countries in the Middle East have one of the highest smartphone adoption and usage rates and this is expected to persist (Durou, 2018). Moreover, high-speed broadband infrastructures are rapidly improving (Durou, 2018). In Africa and some countries in Latin America, where consumers are also price-sensitive, the consumption of services like Netflix is increasing but at smaller rates, especially considering the threat of illegal downloading (U.S. Department of Commerce, 2017) (Bothun and Silver, 2017). Given these consumers' characteristics, this new tier would also help Netflix to attract additional users in these regions.

However, in the U.S. and other comparable markets this move is not believed to be beneficial for Netflix. Offering this cheaper tier there would create an incentive on consumers who currently pay the basic plan to downgrade their membership to the mobile-only version. Willingness to pay is much determined based on the perceived utility of the service (Kim et al, 2016). In these countries, content offerings are compatibles with local desires/interests and, as quality content will likely always be in demand (Deloitte, 2018b), Netflix is delivering a very premium service (Shaw, 2018). Besides, if revenues reduce, cash burn will increase, content spend will slow down and, the impact on share price will not be pleasing for the company and the investors, who have always rewarded Netflix for keeping it growing (Gaus, 2018).

Balancing benefits and threats

In this evolving and challenging industry, if Netflix wants to challenge the maintained supremacy of TV in these emerging areas (Hemant, 2015) and combat many of the rivals that are pricing more aggressively and offering more local programming (like iFlix, HOOQ, Viu), one of the key determinants of success is its pricing strategy – it needs to adapt to accommodate the needs of these consumers (Russell, 2018) (Russell, 2016) (Kim et al, 2016).

As a result, it is expected that Netflix will make this move in several emerging countries in Asia. In fact, the company is already investing on local content in Asia – 17 new shows from five different Asian countries – which leads to believe that Netflix is indeed inclined to pursue this alternative (Shaw, 2018). Additionally, in the Middle East and Africa, although the field is more challenging in terms of readiness to receive the service, it is also likely that the company will pursue with this new model, also because Netflix will be facing more competition from cable TV than in Asia, it could be even harder for the typical consumer to cut the cord and so, additional incentive would help (Durou, 2018).

As for the emerging countries in Latin America, at least in the foreseeable future, it is not likely that the company will offer the new deal there although there is some potential in the area. This is especially because the region shares more cultural similarities with the U.S and, as such, content significance is greater than in other emerging areas like Asia, and besides there are currently more content directly targeting this region, which seems to compensate the current pricing plans. The U.S. and other developed markets are not expected to be the target of this change either, for the reasons mentioned above.

Average price will adjust for these regions (Asia Pacific, Middle East and Africa) when Netflix makes the move with this plan, assumed to be in 2020 after the trial completes one year. Price calculations assumed that 80% of the consumers that are offered this new tier will selected it, while 20% will choose another of the available tiers. For the Asia Pacific region, taking into

consideration the number of developed countries in the region, and the fact that Netflix does not operate in China (a country that represents more than 34% of the population of the region), 62% of countries in the region are expected to benefit from this new pricing strategy (United Nations, 2018), leading to an expected average price of \$7.27 in 2020. In the Middle East and Africa, given the amount of emerging countries (United Nations, 2018), the average price in 2020 is expected to be \$5.32. This leads to an average price of \$9.86 for the International segment in 2020 (as opposed to the base case average of \$10.47), considering that the Asia Pacific region and the Middle East and Africa region are expected to account for 12% and 4.4% of the total memberships in 2020, respectively.

Netflix forecasted penetration rates will also change accordingly. For both regions, the impact of this change is expected to extend in time as young audiences are leading the memberships on these markets (Hemant, 2015). As such, growth is expected to happen throughout a bigger period of time, instead of being concentrated only in the next two or three years. Netflix penetration rates under this scenario will increase and are expected to correspond to 8.1% in Asia Pacific and 8% in the Middle East and Africa, in 2028, which translates into 283 million for the International segment and a total of 377 million memberships (against 353 million in the base case). Revenues will not grow proportionally as average revenue for membership will decrease in this scenario. However, as growth is expected to be pushed to the future, the impact will be showing in the growth rate applied to the annuity considered in the valuation, which will grow from 4.78% to 5.57%. This will lead to an adjusted price is 410.64 dollars per share, which is above the base scenario.

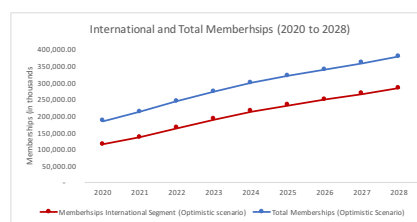


Figure 57: Forecasted International and Total Memberships (Optimistic Scenario)