ANALYSIS OF NETFLIX INC.

STUDENT INVESTITOR 2019

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1. NETFLIX, INC.

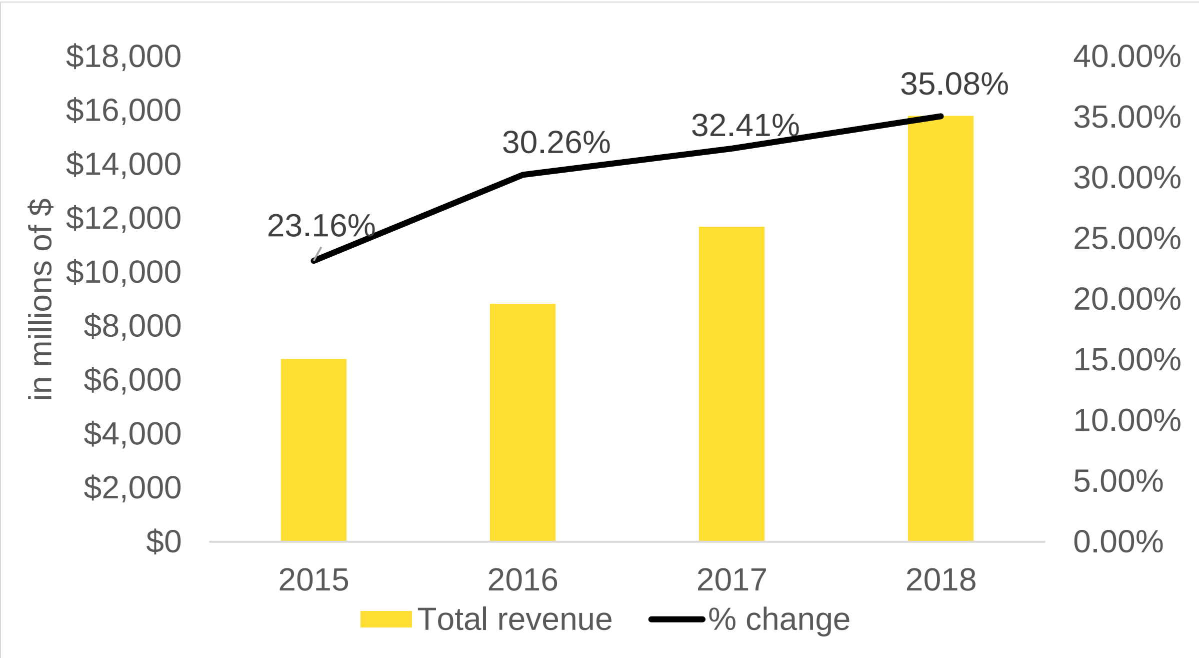
1.1. About the company

Netflix, Inc. is an American video on demand service headquartered in Los Gatos, California, founded in 1997 by Reed Hastings and Marc Randolph in Scotts Valley, California. The company's primary business is its subscription-based streaming OTTservice which offers online streaming of a library of films and television programs, including those produced in-house. As of April 2019, Netflix had over 148 million paid subscriptions worldwide, including 60 million in the United States, and over 154 million subscriptions total including free trials. It is available almost worldwide except in mainland China (due to local restrictions) as well as Syria, North Korea, and Crimea (due to US sanctions). The company also has offices in the Netherlands, Brazil, India, Japan, and South Korea.

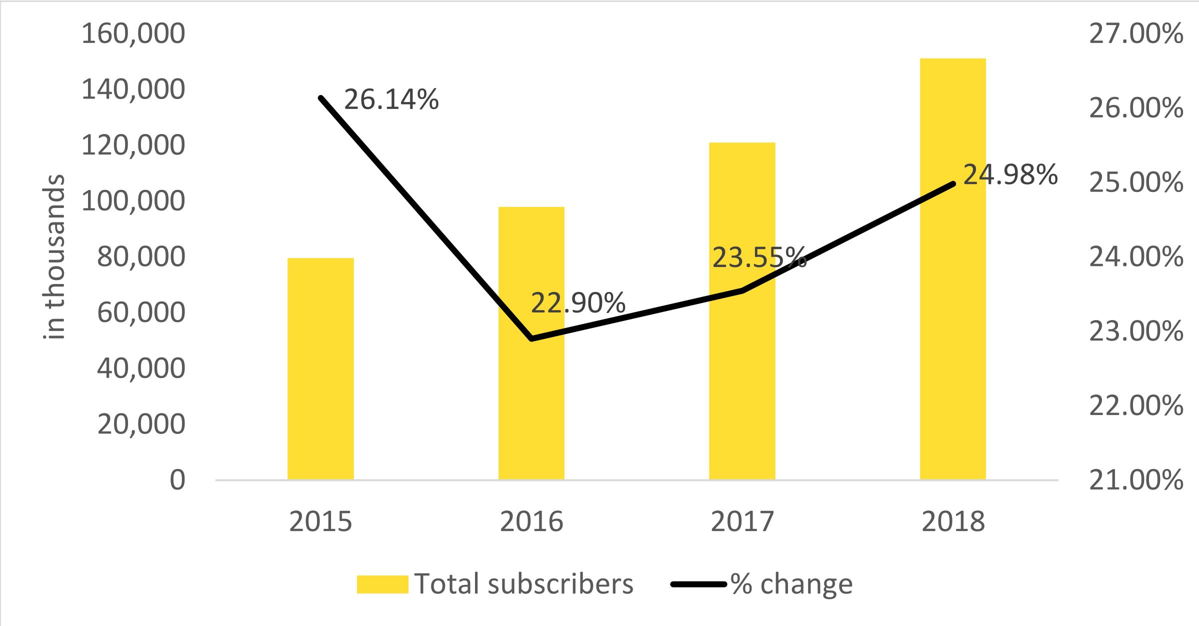
Netflix's initial business model included DVD sales and rental by mail, but Hastings abandoned the sales about a year after the company's founding to focus on the initial DVD rental business. Netflix expanded its business in 2007 with the introduction of streaming media while retaining the DVD and Blu-ray rental business. The company expanded internationally in 2010 with streaming available in Canada, followed by Latin America and the Caribbean. Netflix entered the content-production industry in 2012, debuting its first series *Lilyhammer*.

Netflix offers three main types of streaming membership plans. Their “basic” plan includes access to standard definition quality streaming on a single screen at a time. “Standard” plan is their most popular streaming plan and includes access to high definition quality streaming on two screens concurrently. “Premium” plan includes access to high definition and ultra-high definition quality content on four screens concurrently. As of March 31, 2019 , pricing on all plans ranged in the U.S. from $8.99 to $15.99 per month and internationally from the U.S. dollar equivalent of approximately $3 to $20 per month.

Since 2012, Netflix has taken more of an active role as producer and distributor for both film and television series, and to that end, it offers a variety of "Netflix Original" content through its online library. By January 2016, Netflix services operated in more than 190 countries. Netflix released an estimated 126 original series and films in 2016, more than any other network or cable channel. Their efforts to produce new content, secure the rights for additional content, and diversity through 190 countries have resulted in the company racking up billions in debt: $21.9 billion as of September 2017, up from $16.8 billion from the previous year. $6.5 billion of this is long-term debt, while the remaining is in long-term obligations. In October 2018, Netflix announced it would raise another $2 billion in debt to help fund new content.



Graph 1: Total revenue (in millions of $) and annual percentage change, 2015- 2018



Graph 2: Total number of subscribers (in thousands) and annual percentage change

1.2. Original programming

A "Netflix Original" is content that is produced, co-produced, or distributed by Netflix exclusively on their services. Netflix funds their original shows differently than other TV networks when they sign a project, providing the money upfront and immediately ordering two seasons of most series.

In March 2011, Netflix began acquiring original content for its library, beginning with the hour-long political drama *House of Cards*, which debuted in February 2013. *Orange Is the New Black* debuted on the streaming service in July 2013. In a rare discussion of a Netflix show's ratings, Netflix executives have commented that the show is Netflix's most-watched original series. In February 2016, *Orange Is the New Black* was renewed for a fifth, sixth and seventh season. On June 9, 2017, season 5 was premiered and the sixth season premiered on July 27, 2018.

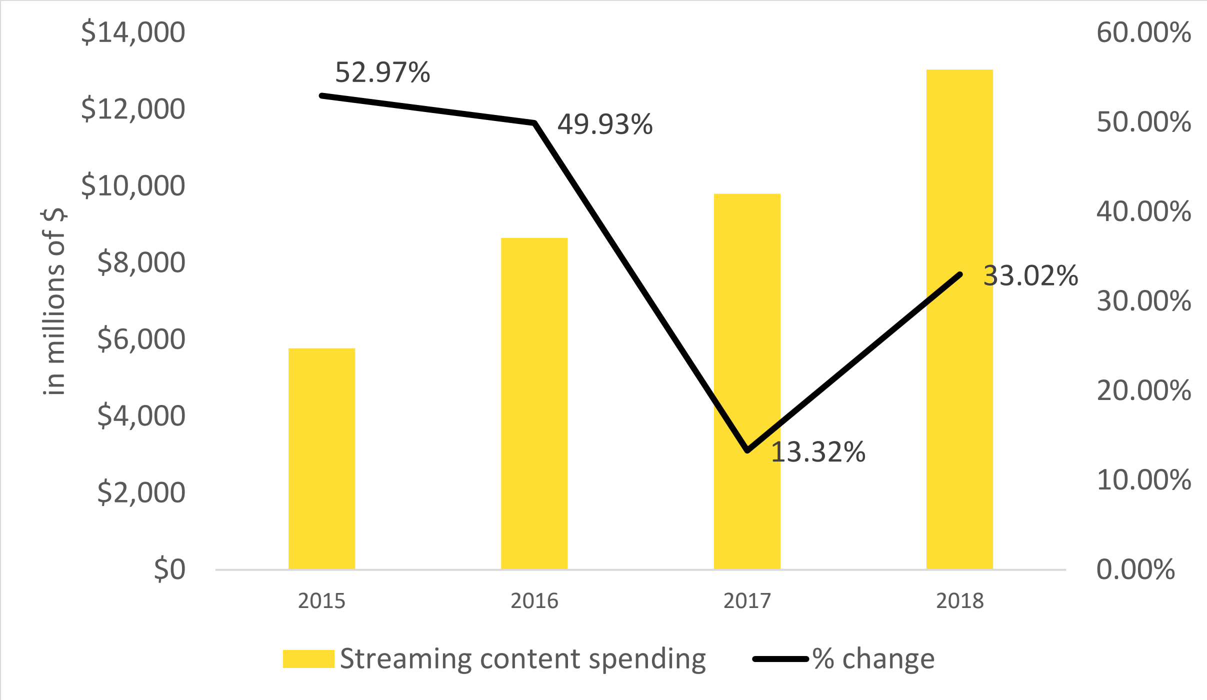
In November 2013, Netflix and Marvel Television announced a five-season deal to produce live-action Marvel superhero-focused series: *Daredevil, Jessica Jones, Iron Fist and Luke Cage*. In addition to the Marvel deal, Disney announced that the television series *Star Wars: The Clone Wars* would release its sixth and final season on Netflix, as well as all five prior and the feature film. The new Star Wars content was released on Netflix's streaming service on March 7, 2014.

The science fiction drama *Sense8* debuted in June 2015, which was written and produced by The Wachowskis and J. Michael Straczynski. *Bloodline* and *Narcos* were two other drama series that Netflix released in 2015. On November 6, 2015, *Master of None* premiered, starring Aziz Ansari. Other comedy shows premiering in 2015 included *Unbreakable Kimmy Schmidt*, *Grace and Frankie*, *Wet Hot American Summer: First Day of Camp*, and *W/ Bob & David*.

Netflix continued to dramatically expand their original content in 2016. The science fiction horror *Stranger Things* premiered in July 2016, music-driven drama *The Get Down in August*, historical drama *The Crown* in November, and the year's premieres included comedy shows such as *Love, Flaked, Netflix Presents: The Characters, The Ranch, and Lady Dynamite*. Netflix released an estimated 126 original series or films in 2016, more than any other network or cable channel.

Netflix has also invested in distributing exclusive stand-up comedy specials from such notable comedians as Dave Chappelle, Louis C.K., Chris Rock, Jim Gaffigan, Bill Burr and Jerry Seinfeld. In January 2017, Netflix announced all Seinfeld's *Comedians in Cars Getting Coffee* episodes and season 10 would be on their service.

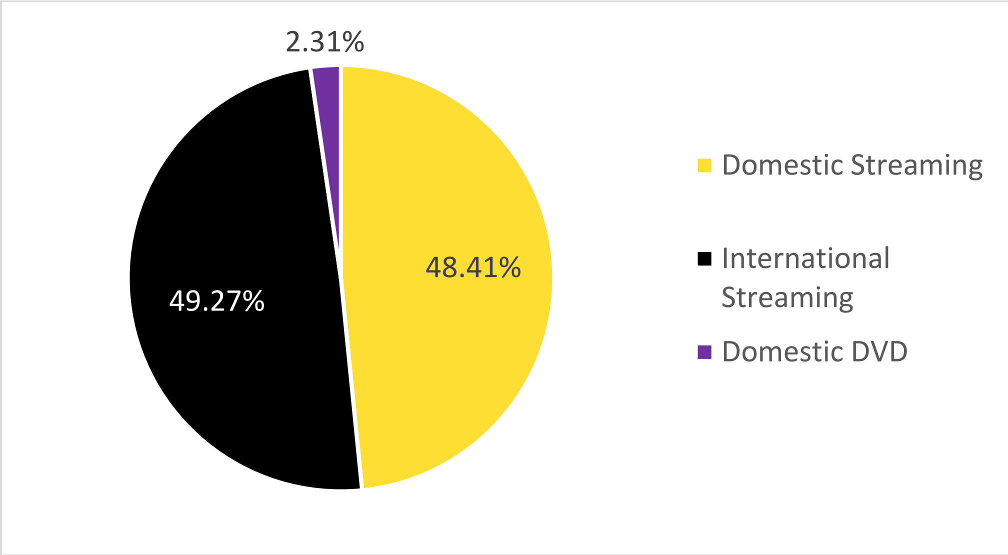
In October 2017, Netflix iterated a goal of having half of its library consist of original content by 2019, announcing a plan to invest $8 billion on original content in 2018. There will be a particular focus on films and anime through this investment, with a plan to produce 80 original films and 30 anime series. In May 2018, chief content officer Ted Sarandos stated that Netflix had increased its spending on original content, with 85% of its new content spending that year being devoted to it. On December 31, 2018, a concert film of Taylor Swift's Reputation tour was released on Netflix. In February 2019, Gwyneth Paltrow's lifestyle brand Goop signed a deal to produce a wellness-themed docuseries for Netflix.



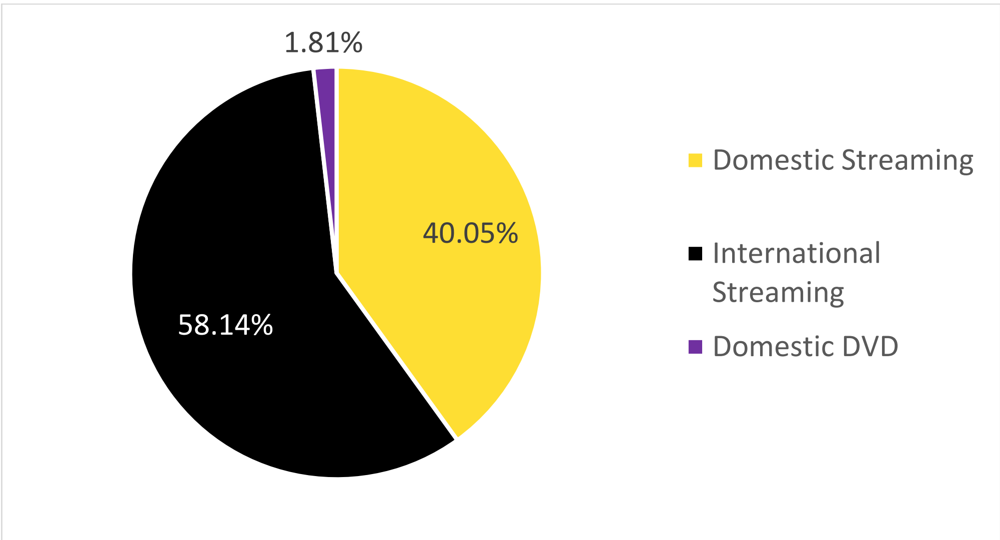
Graph 3: Content spending (in millions of $) and percentage change in spending, 2015 – 2018

1.3. Business segments

The Company has three reportable segments: Domestic streaming, International streaming and Domestic DVD. The Domestic streaming segment derives revenues from monthly membership fees for services related to streaming content to members in the United States. The International streaming segment derives revenues from monthly membership fees for services related to streaming content to members outside of the United States. The Domestic DVD segment derives revenues from monthly membership fees for services consisting solely of DVD-by-mail.



Graph 4: Share of segments in total revenue

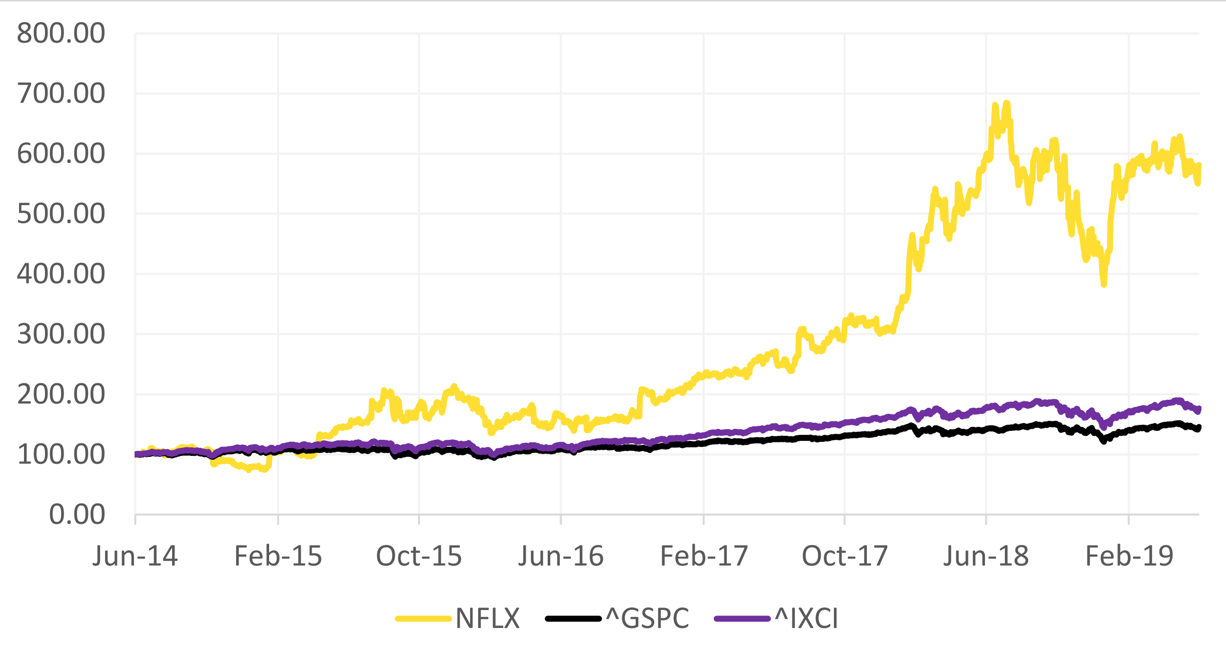


Graph 5: Share of segments in total subscribers

1.4. Stock information

The average price of Netflix`s share in the last year was $345. Even though the price is the same as a year before, it returned 497% to its shareholders through price appreciation in the previous five years. S&P 500 index returned 47% in the same period, while the NASDAQ Composite returned 78%.

The stock`s beta coefficient, which shows how volatile a stock is relative to the market represented by a market index, is 1.58 (three years of monthly prices). It shows that Netflix is more volatile then the market, thus a more risky investment. This is true considering that Netflix still does not have a stabile business model due to large cash burn on acquiring new content and is yet to be free cash flow positive. It also never paid dividend to this date. Looking at the most used valuation ratio, the price-to-earnings ratio (PE ratio), Netflix with this ratio of 129 can be considered highly valued compared to its peers (median PE ratio of its peers is 14). But this high ratio is not unexpected since Netflix is still a high-growth story compared.



Graph 6: Netflix`s stock price compared to S&P500 and NASDAQ Composite indexes (June 2014 – June 2019)

2. ANALYSIS OF NETFLIX`S EXTERNAL AND INTERNAL ENVIRONMENT

2.1. Analysis of the Enterteinment and Media Industry with Porter`s Five Forces Model

Competitive Rivarly

The media and entertainment industry has intense level of competitive rivarly, pressuring the companies to retain customers trough offering affordable prices. Netflix is facing severe competition from traditional broadcasters, rival companies providing videos on demand and retailers selling DVDs. Amazon is the main direct competitor of Netflix as both of the companies are providing DVDs on rent, thus competing for the similar target market in this domain. Apart from Amazon, there are alternative online channels that provide access to media content such as Hulu, creating stiff competition acquiring rights to display the content.

Threat of New Entry

Netflix customers can bargain on the brand. New entrants may have a novelty factor or be considered "cool" in certain circles. To compete, Netflix has to refine its brand to appeal to a broad range of consumers. Similarly, Netflix has to ensure its brand works. Part of this is making sure the technology behind its streaming service works well, but the company also has to make sure people can relate to the brand in other ways, like how they search for titles to watch.

Threat of Substitution

Netflix subscribers also have bargaining power concerning movie and television show title selection. As video streaming has become more popular, the number of new entrants has also increased. However, instead of taking Netflix head on, new entrants are taking on genres. For example, streaming video service Fandor has more cinematic films. It specializes in foreign movies, independent films and documentaries, as well as cinema classics such as movies from the Criterion Collection. Netflix has to offer films that appeal to these viewers if it is going to compete in these niche spaces. Otherwise, some subscribers may jump ship.

Supplier Power

The suppliers of Neflix can be viewed as holding high bargaining power. This high degree of influence on pricing is due to the few number of entities producing media and entertainment based content. Obtaining a contract and acquiring the licence to distribute the content involves negotiation on pricing, where the suplliers have an edge. The suppliers have a weaker bargaining power while dealing with the traditional broadcasting businesses, but online distributors like Netflix face a higher degree of influence from the suppliers. Since Netflix is competing against traditional media distributors, it has to show greater flexibility in agreement than the traditional businesses. Netflix had to lower its profits to maintain contract with the suppliers in order to establish customer base, highlighting the high bargaining power of its suppliers.

Buyer Power

One of the biggest issues Netflix faces is the cost of switching services is so easy. There is no annual contract, and the cost of signing up for service is minimal. Also, most video streaming service providers offer a free trial. It is easy for customers to subscribe to one streaming video service one month, and then switch the next. They can go from Netflix to Hulu, and then HBO Now or Showtime Anywhere. Netflix has to make sure its selection is compelling enough for subscribers to justify keeping the service year-round. In addition to format preferences, Netflix also has to keep viewer preferences in mind. This includes securing the ability to stream the content viewers want in addition to some of the added viewing features, such as closed captioning and foreign languages. Netflix offers closed captioning and some foreign language options, but the usefulness of these features is limited by the streaming device the viewer uses.

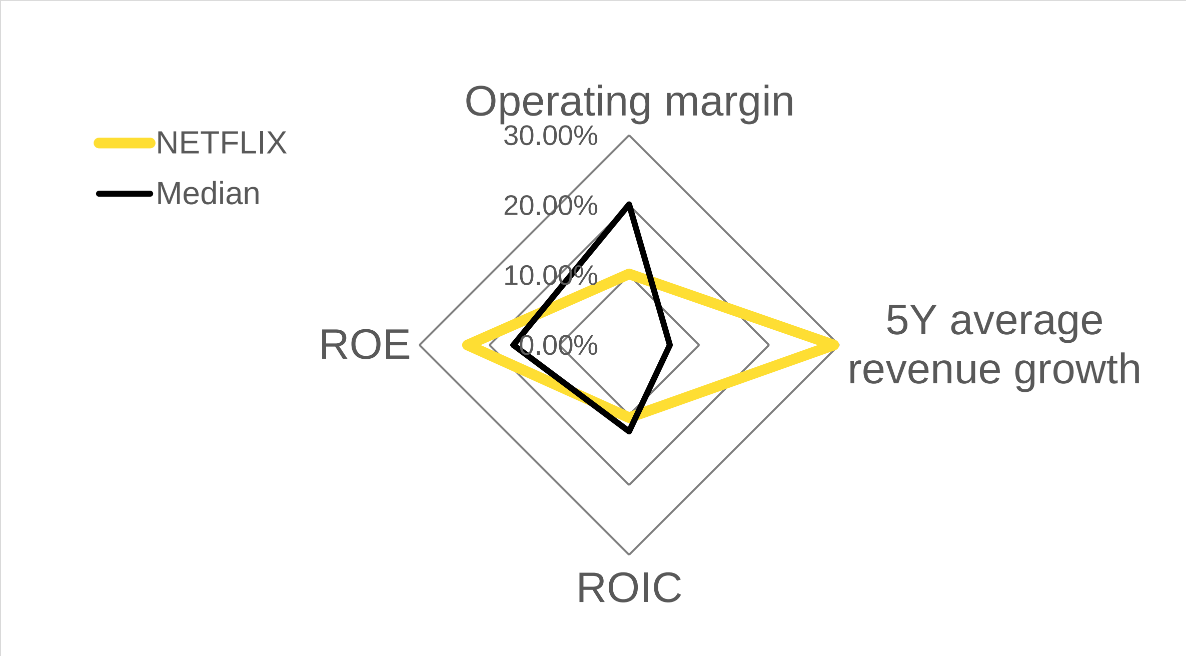
2.2. Analysis of Netflix`s Competitors

The problem with choosing peer companies for Netflix is that there are no direct competitors traded on the stock exchange, so only fairly similar companies can be choosen. The closest competitors are Comcast Corporation, AT&T Inc. and The Walt Disney Company. Business of each of the competitors is specific and, to a lesser or greater extent, coincides with Netlix's activity.

Comcast is a media and technology company and consists of Cable Communications and NBCUniversal. One of the services it provides is streaming, or Internet broadcasting on cable television. AT&T is a provider of telecommunication, media and technology services globally. The most interesting segments are the Communications segment and the WarnerMedia segment, which develops, produces and distributes feature films, television, games and other content, and is the most similar to Netflix. Walt Disney is a global entertainment company. It consists of 4 segments, most important of which are Media Networks and Studio Entertainment. The entertainment segment produces action and animated films, video content, music recordings and theater performances. Disney plans in November 2019 to make the Disney + streaming service that will actually be the most dangerous competition to Netflix because, among other things, it costs just $7 and all Marvel movies will be available only there, as well as plenty of other movies and series Disney has.

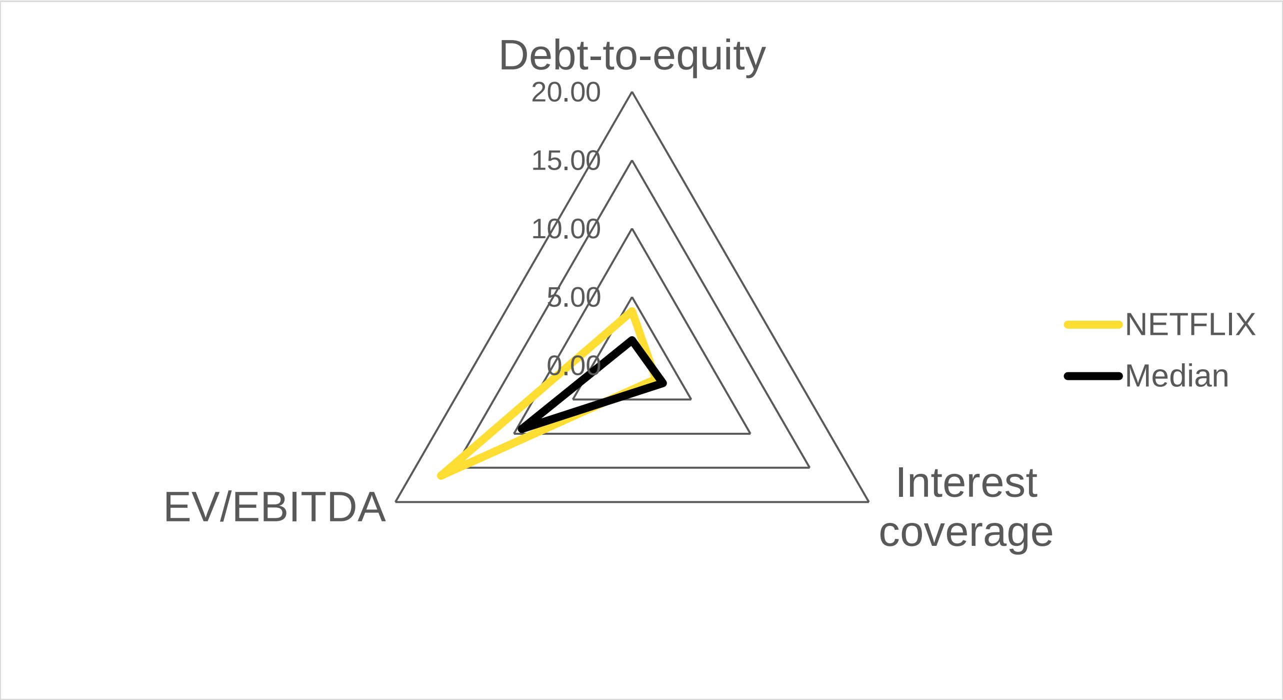
For comparison, we have observed indicators: relative (gross profit margin, five-year average income growth, ROIC, ROE) and absolute (D/E financing coefficient, interest coverage ratio, EV/EBITDA, P/E ratio).

Relative Indicators. Netflix's gross margin is half as the median industry, showing how much a company earns per $1 of revenue, in this case 10 cents to $1 in revenue. Five-year Netflix revenue growth is quite high and is higher than the industry average, explaining high P/E and EV/EBITDA ratios. ROIC or return on invested capital shows that on each invested dollar, Netflix generates 10 cents of operating profit, while the rest of the industry generates 12 cents. ROE or return on equity shows that Netflix with less invested equity generates greater profit than industry.



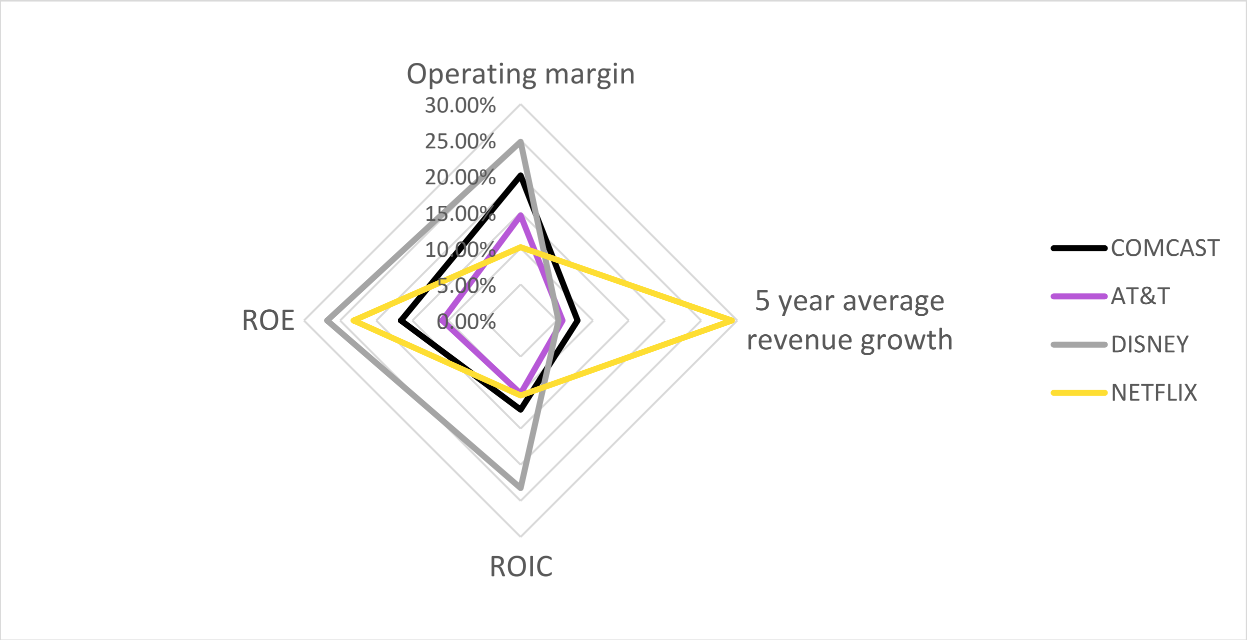
Graph 7: Relative indicators, Netflix and median of the industry, 2018

All of Netflix`s absolute indicators are higher than the industry median, except for interest coverage, but the difference is negligible. An important difference is seen in the Netflix`s P/E ratio that drastically deviates from the average, which was 118.55 at the time of this analysis, which would mean that investors were willing to pay $118.55 for a $1 earning. The high P/E suggests that Netflix shares are valued higher then the industry. Also, Netflix's financing (D/E) coefficient amounts to 3.96, which means that it had $4 of liabilities on $1 capital, which could be improved (reduced). EV/EBITDA is higher than the industry and also shows higher valution compared to the industry, but also to the large growth rate of the company itself. EV/EBITDA shows how many times investors would have to pay the company`s EBITDA if they would buy the entire company. It is a better indicator then P/E Because it takes into account enterprise value, not just the market capitalization, an it eliminates non-core costs like taxes, interest, and amortization. The large P/E ratio and EV/EBITDA can be explained by high revenue growth and high ROE.



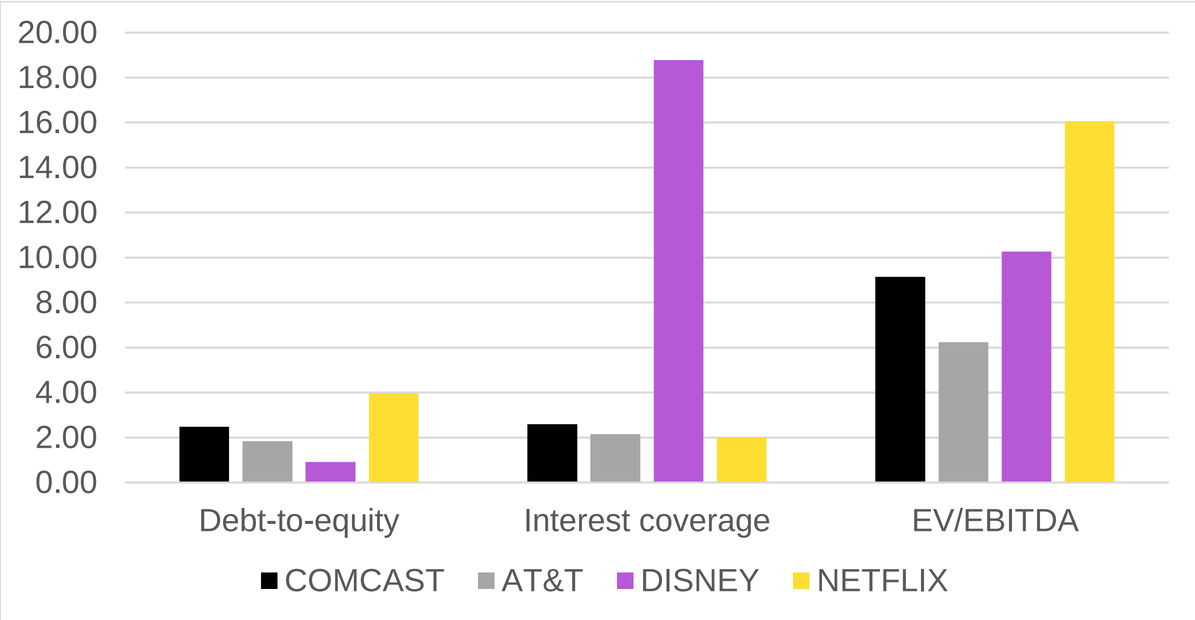
Graph 8: Absolute indicators – Netflix and median of the industry, 2018

When looking at the relative Indicators, Disney has the highest gross margin of 25%, while Netflix has the lowest of 10%. Five-year revenue growth is the largest for Netflix (30%), and Disney is leading in ROIC and ROE, each about 25%.



Graph 9: Relative indicators – Netflix and competitors, 2018

Looking at the absolute indicators, Disney's interest coverage ratio is about 18, while it is around 2 for others. It shows that Disney can cover its interest costs with its EBIT 18 times. Netflix has the highest EV/EBITDA and D/E ratio compared to other competitors. Also, Netflix is an outlier considering its P/E ratio, which was already concluded before.



Graph 10: Absolute indicators – Netflix and competitors, 2018

2.3. Analysis of Netflix`s Strenghts, Weaknesses, Opportunities and Threats

Strenghts

Netflix is the leading online streaming site. Although others have risen up, Netflix is well known throughout the world for it’s selection and relatively cheap monthly price. Because of the popularity, the consumer base is massive — over 100 million users massive and viewable in over 180 countries. With such high numbers, Netflix has an easy time bargaining for content from many countries. The massive exposure is promising for companies. Netflix often picks up television series that have been cancelled and left to rot. They create “sequels” or new seasons years after the original show ended. Like with Gilmore Girls, which had a Netflix special spinoff.

Netflix originally streamed older shows like Friends, but within the last few years, has started creating their own original content. Many of which have become rousing successes including

Orange Is The New Black and Stranger Things. Not only were these shows developed with interesting premises, viewers able to binge-watch the series, rather than forced to wait each week for a new episode like with traditional television shows.

They're also branching out more into foreign shows. Netflix created a second season for a Japanese reality show called Terrace House that's been a hit with international viewers. They've gone on to renew the series several times, allowing people who may never travel to these countries to catch a glimpse. And surprisingly, people are loving it.

The biggest complaints among users who watch (or used to watch) television were far too many commercials. Many felt they were paying to watch commercials with television shows mixed in. Customers jumped on Netflix for their ad-free content and although Netflix has discussed putting ads in, the viewers have unanimously voiced their complaint against it.

Weaknesses

Even though they're branching into more original content, the cost of these shows and movies is incredibly high. In 2017, Netflix invested $2.5 billion just to sure the rights for these original shows. They've also decided on some movies that users weren't thrilled with. This included the 3 movie deal with Adam Sandler — great for Sandler, but it left a terrible impression on users. The ratings page the movies on Netflix are skewered by dozens of 1 star (bad) reviews on the site.

And speaking of reviews, users have also complained about that system because of how new shows are recommended. Initially, you could offer a star rating to shows. But now all you can do is give it a thumbs up or a thumbs down. Often, the site uses a "match" system to select your next show, but it's not accurate. A show you despise can still manage to be a "92% match."

Also, shows disappear. Netflix doesn't own the rights to their shows. When the rights expire, the shows disappears. They can eventually re-appear, but no one knows when. What is known is that it's not uncommon for seasons to just disappear without notice.

On a side note, Netflix has gotten flack for their lack of environmental initiative. Competition, like Amazon, have openly discussed their plans to be environmentally-friendly. They're using renewable energy for their services, but Netflix hasn't matched the initiative.

Netflix is also inching their prices up. Initially, a monthly subscription cost less than $10 a month. But they've risen the prices twice within a couple years. Although the hike has been a dollar or so each, much of the consumer base loved Netflix for their affordability. Seeing the prices rise makes them wonder if this is just the beginning.

Opportunities

Even though Netflix is available in many locations, China isn't one of them. Netflix has been having difficulties with licensing. Now they're trying a different method of joint-venture to use Chinese media to stream content.

Netflix is also partnering with other companies around the world, like Europe. They're working with the BBC to not only comply with European laws, but to also gain knowledge about this customer base. It's a double win for the company. As technology advances, Netflix can take advantage. We're watching shows in higher quality on different formats like smartphones and tablets. Netflix is viewable on these devices, and can offer shows in the quality people desire.

Threats

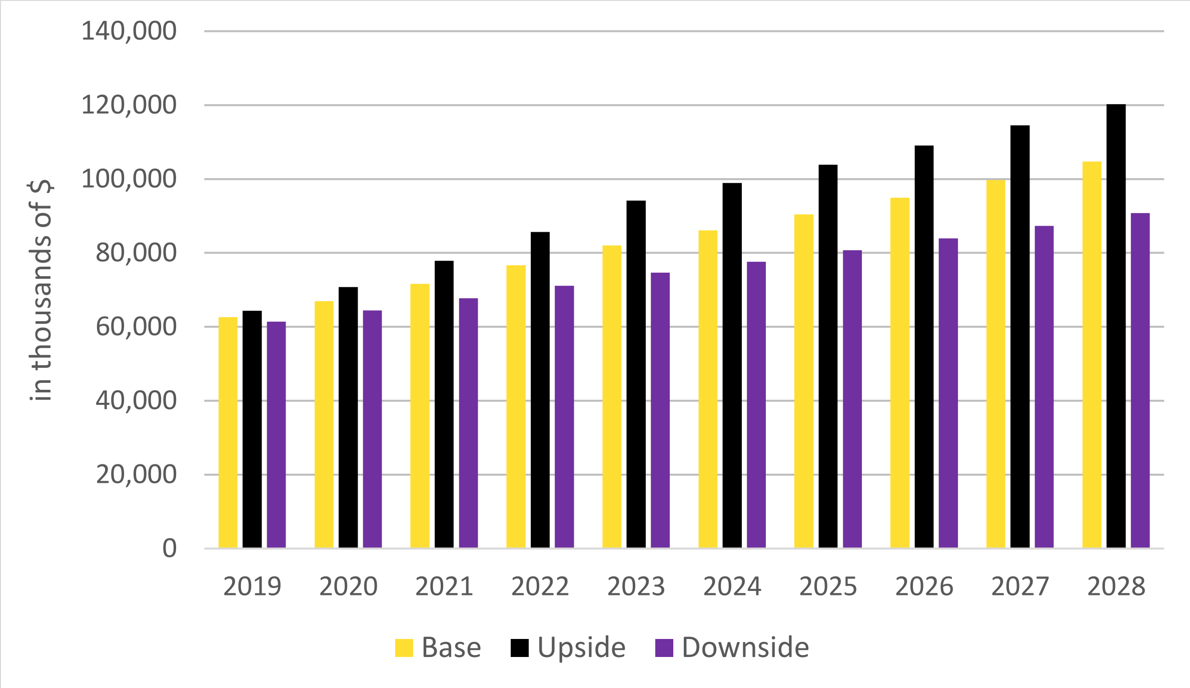
The competition is fierce. Facebook, the social media ogre, has started to create their own original content. But there's also Amazon, Hulu, HBO, and YouTube to worry about. These platforms offer their own unique program for a price. Although the offerings aren't as expansive as Netflix, the brands have the power to grow. And what they have, Netflix never will. Like Game of Thrones owned by HBO. Or the exclusive shows by YouTube creatives on YouTube Red. Netflix also did a deal with Disney to show their animated films. But that has essentially fell through as it seems Disney cretaing its own streaming service. Monthly subscriptions appear to be the future for television and content creation, and everyone wants a piece of the market.

3. DCF AND RELATIVE VALUATION OF NETFLIX

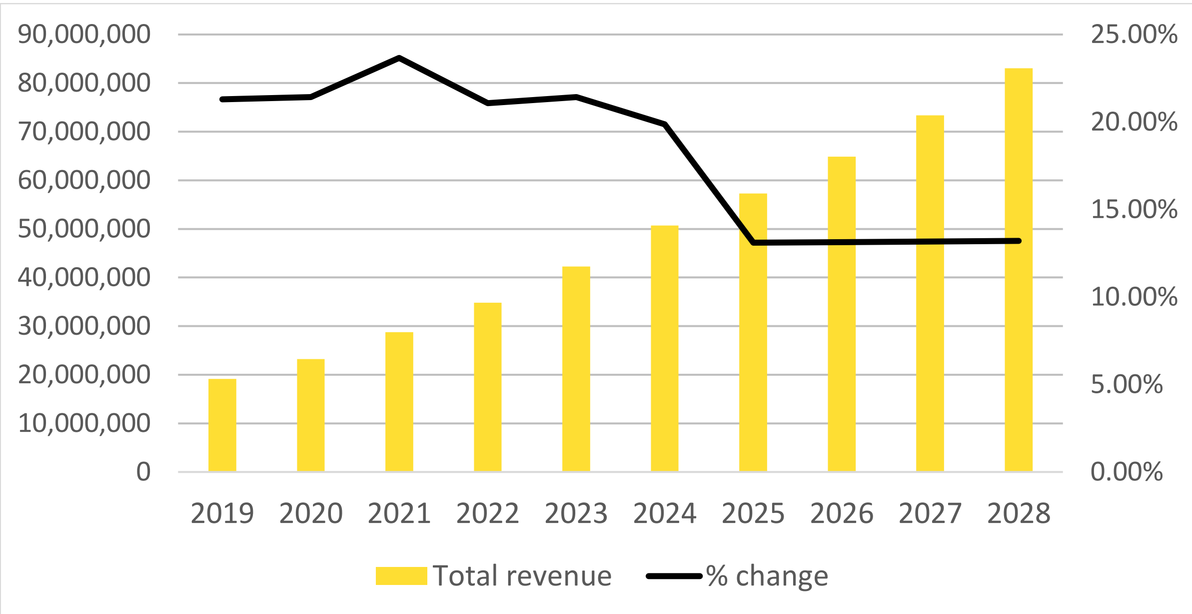
3.1. Revenue projections

Projections of Netflix`s financial statements were done for ten year in the future because Netflix is stil a growth company that has yet to produce a positive cash flow, so a longer period of projection is needed fot it to reach a stable growth phase. Revenue was projected for the three segments seperatelly, that is, for Domestic streaming, International streaming and Domestic DVD.

Revenue for streaming segments was projected by looking at historical growth rates in paid memberships and by assuming the growth rates for the future. The same type of growth assumptions were made for average revenue per user (ARPU) and by multiplying the number of projected paid memberships and yearly ARPU, the revenue projections were made. Also, three cases for growth in paid memberships were made for Domestic streaming segments. Since the competition is getting more fierce in the domestic market, three different scenarios were looked at to determine the impact of this competition on Netflix`s revenue. In the Base case growth, Netflix will continue to be a leading video streaming service, while its existing and yet to be competitors won`t take away too much of its market share. In the Upside case, Netflix will actually become even more dominant on the market and take market share from its competitors, thus increasing its revenue even more. In the Downside case, Netflix`s competitors will take a more significant market share by attracting new members and stealing existing ones from Netflix, leading to a decrease in revenue growth for Netflix. Revenue from Domestic DVD segment is projected to decrease by the year until it finally reaches zero in 2022, since that is the year Netflix plans to stop operating in this segment. Detailed assumptions can be found in Appedinx.



Graph 11: Number of paid memberships in Domestic streaming segment per growth cases (base, upside and downside), in thousands of dollars



Graph 12: Total revenue and annual growth, Base case, in thousands od dollars

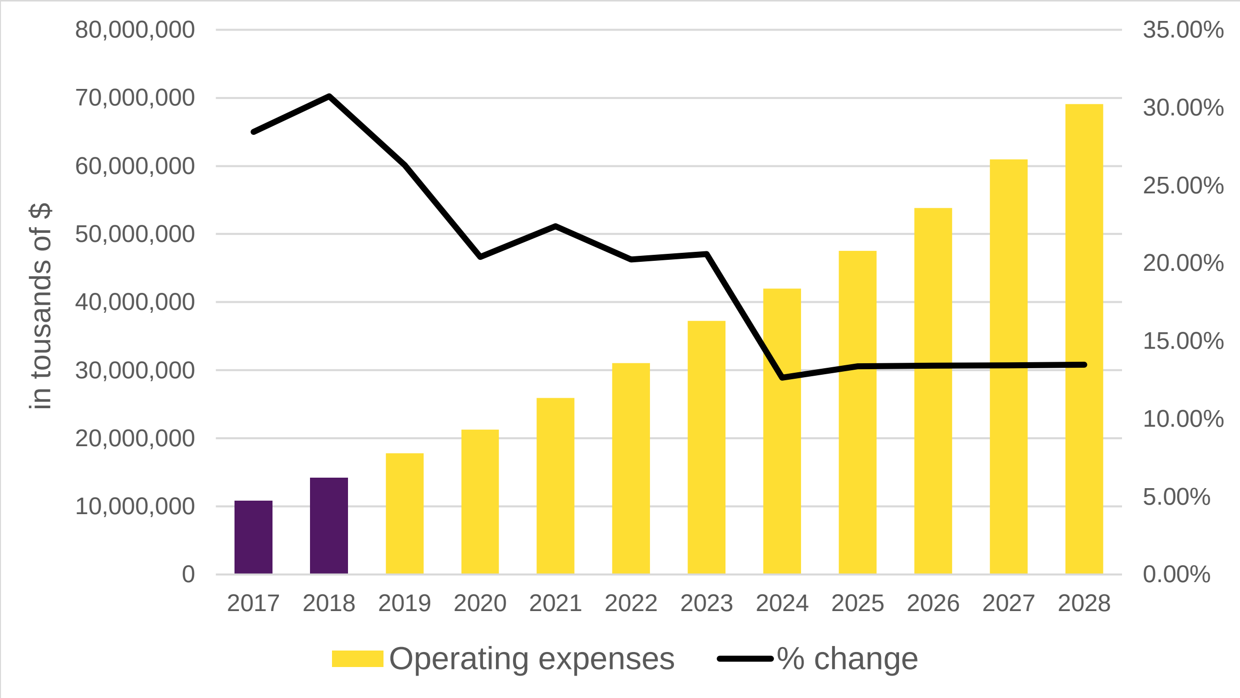
3.2. Expenses and Cash Flow Projections

Expenses and cash flow projections were made by either looking at their percentage of revenue or looking at their historical change. Assumptions were then made by either following a perceived trend in percentages of revenue or the rate of change, or by taking an average when there was no perceived trend. This was done for projecting Cost of revenues (which was separated to Amortization, Depreciation and Other), Marketing expense, Technology and development expense and General and administrative expense.

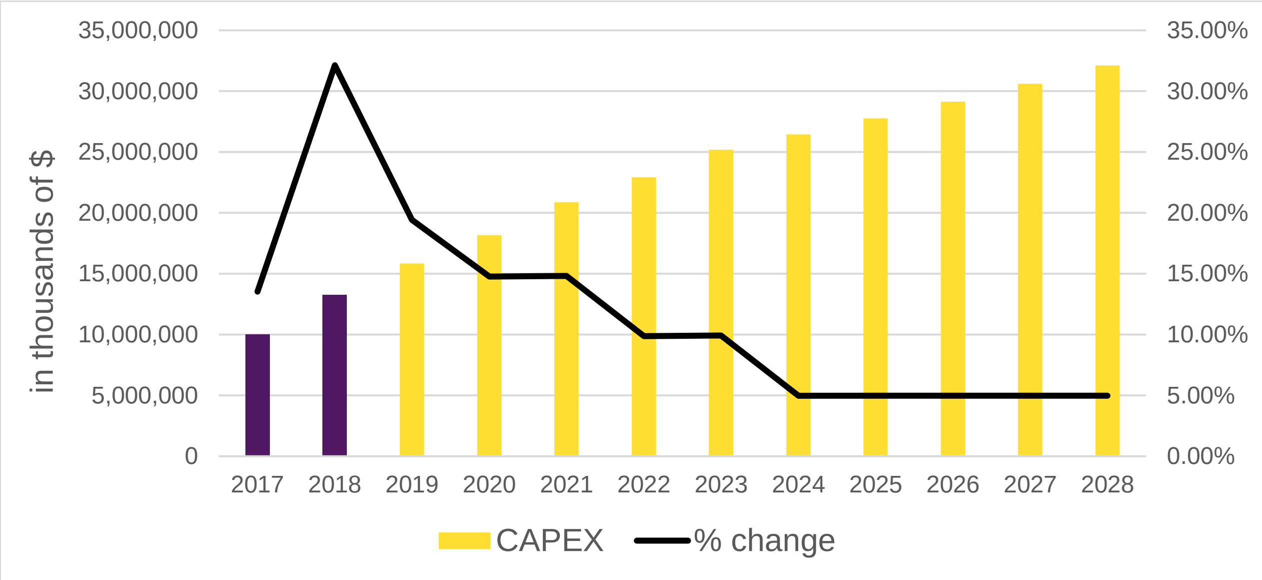
Additions to streaming content assets, which include spending on aquiring lincenses for shows and development of original content, are classified as Cash flows from operating activities, but for the purpose of this analysis, it was reclassified as Cash flows from investing activities. The reason for this was that aquiring new content for Netflix is the same as buying new properties and equipment for other, less online-oriented business, and so these adiitions should be considered as capital expenditures. When reclassified, CAPEX consists of Additions to streaming content assets, Aqusition of DVD content assets and Purchase of property and equipment (the last two were already classified as Cashs flows from investing activities). Additions to streaming content assets was projected by looking at historical rates of change, Aqusitions of DVD content assets is decreasing by the year until it finally falls to zero in 2022, the year Netflix plans to shut down the DVD business, while Purchase of property and equipment was held constant at 150 million dolars since these investment are not important for business growth of Netflix.

CAPEX, more precisely Additions to streaming content assets, is one of the most important projections for this model. The reason is that a big risk for Netflix comes from its ability to attract new subscribers and keep the existing ones without spending more and more on new content. Since the competition is becoming more and more fierce, the question is can Netflix keep its content spending from further reducing its cash flow. Which year in the future Netflix becomes free cash flow positive depends on this ability. In this model, increases in Additions to streaming content assets fall from 20% in 2019 to 5% in 2028, with the assumption that Netflix will be able to attract new subscribers and keep existing ones by relaying on its already existing content base and thus reducing its spending on new content.

Non-cash items from cash flow statement were projected as a percentage of revenue, with Additions to streaming content assets deducted from them, as previously stated. Changes in operating assets and liabilities were projected as a percentage in percentage change in revenue. Detailed calculations can be found in Appendix.



Graph 13: Total operating expenses and their percentage change, in thousands of dollars, 2017 - 2028



Graph 14: CAPEX and its percentage change, in thousands of dollars, 2017 – 2028

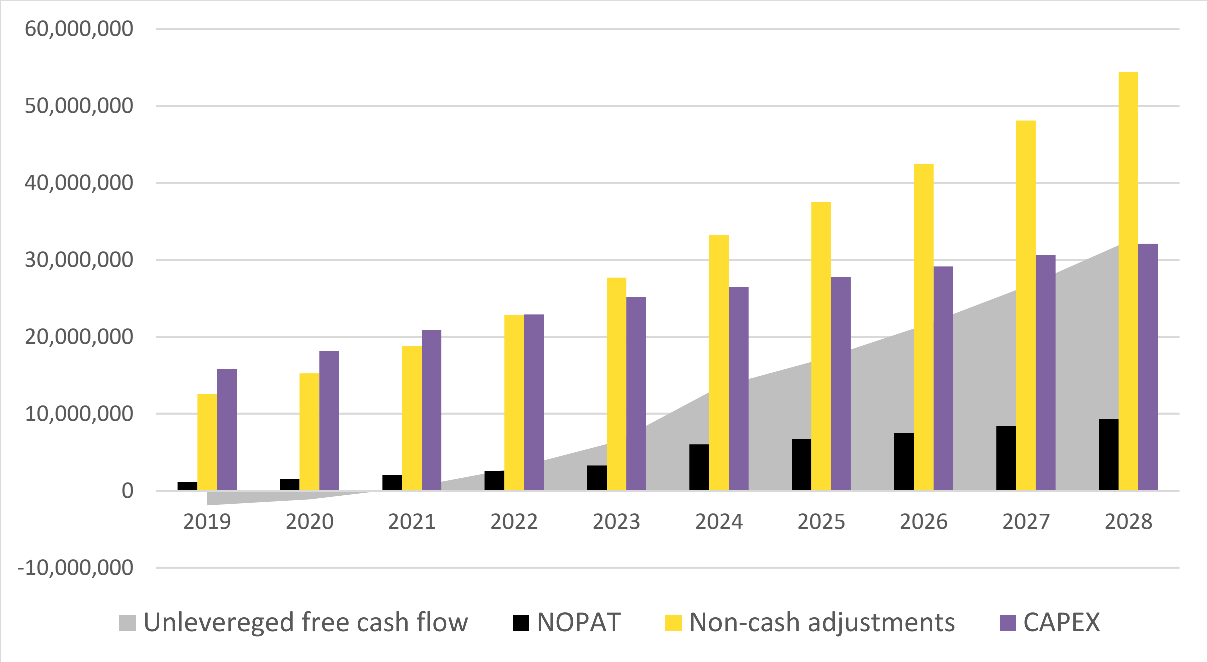
3.3. Calculating Unlevereged Free Cash Flow

By deducting total operating expenses from total revenue, EBIT is calculated. EBIT margin is increasing from 10% in 2018 to 14% in 2028. Deducting tax from EBIT, net operating profit after tax is calculated (NOPAT). The tax rate was assumed to be 10% in 2019 and 20% in 2028. To calculate unlevereged free cash flows, non-cash items and change in operating assets and liablities are added to NOPAT, while CAPEX is deducted from it.

	Units:	2019	2020	2021	2022	2023
Total revenue	*$ in `000*	19.156.787	23.259.484	28.763.289	34.824.046	42.286.418
(-) Total operating expenses	*$ in `000*	17.919.855	21.577.429	26.406.983	31.750.735	38.288.136
EBIT	*$ in `000*	1.236.932	1.682.055	2.356.306	3.073.311	3.998.281
Tax rate	*%*	10,00%	12,00%	14,00%	16,00%	18,00%
NOPAT	*$ in `000*	1.113.239	1.480.209	2.026.423	2.581.581	3.278.591
(+) Non-cash adjustments	*$ in `000*	12.552.532	15.240.834	18.847.215	22.818.541	27.708.278
(+) Changes in operating assets and liabilities	*$ in `000*	270.368	329.890	442.551	487.334	600.036
(-) CAPEX	*$ in `000*	15.832.124	18.169.943	20.859.935	22.919.928	25.196.921
UNLEVEREGED FREE CASH FLOWS	*$ in `000*	**-1.895.985**	**-1.119.011**	**456.255**	**2.967.528**	**6.389.984**

	Units:	2024	2025	2026	2027	2028
Total revenue	*$ in `000*	50.685.200	57.327.201	64.858.341	73.399.758	83.089.325
(-) Total operating expenses	*$ in `000*	43.130.152	48.898.316	55.456.251	62.913.968	71.397.012
EBIT	*$ in `000*	7.555.048	8.428.885	9.402.090	10.485.790	11.692.313
Tax rate	*%*	20,00%	20,00%	20,00%	20,00%	20,00%
NOPAT	*$ in `000*	6.044.039	6.743.108	7.521.672	8.388.632	9.353.851
(+) Non-cash adjustments	*$ in `000*	33.211.601	37.563.788	42.498.587	48.095.371	54.444.483
(+) Changes in operating assets and liabilities	*$ in `000*	675.331	534.071	605.565	686.800	779.120
(-) CAPEX	*$ in `000*	26.449.267	27.764.230	29.144.942	30.594.689	32.116.923
UNLEVEREGED FREE CASH FLOWS	*$ in `000*	**13.481.704**	**17.076.737**	**21.480.882**	**26.576.114**	**32.460.531**

Table 1: Unleveraged free cash flow calcuation, 2019 - 2028



Graph 15: Unlevereged free cash flows and its components; 2019 – 2028

3.4. Calculating Weighted Average Cost of Capital

Cost of equity for Netflix was calculated using the capital asset pricing model formula. For the risk free rate, yield on 10 year US government bond was used, which was 2.51% at the time of writing this analysis. Beta coefficient was calculated using three year monthly prices and was equal to 1.58. Risk premium for US was taken from Damodaran`s web site and was equal to 5.96%. Using these numbers, cost of equity was 11.93%. For cost of debt, yield on Netflix`s 10 year bond was used, which was 3.82% at the time of analysis. When determining the weights of equity and debt financing, market capitalization of Netflix`s stock was used, while for the weight of debt, book value of debt from the balance sheet was used. Weighted average cost of capital was calculated to be 11.44%.

Units:		
Risk-free rate	%	2,51%
ß	a.s.	1,58
Risk premium	%	5,96%
Cost of equity	**%**	**11,93%**
Yield on 10y bond	**%**	**3,82%**

	Units:	
Market value of equity	$ in B	163,892
Book value of debt	$ in B	10,360
% of equity	%	94,05%
% of debt	%	5,95%
WACC		**11,44%**

Table 2: Calculation of weigted average cost of capital

3.5. Determining Fair Value per Share with DCF

After discounting unlevereged free cash flows with WACC to their present value and calculating the terminal free cash flow value (terminal growth rate was assumed to be *2%*), those two were sumed to arrive at enterprise value of $167.058 million for Netflix. Deducting the book value of debt and adding cash and cash equivalents, fair equity value of Netflix was calculated to be $160.492 million, which is $367.60 per share. This is for the Base case growth in domestic market, while fair values per share in the Upside and Downside cases were $411.84 and $331.14, respectively. At the time of this analysis when market price was $374.85 (May 2019), in Base case growth, Netflix is fairly valued. In Upside case growth, it is undervalued by about 10%, and in Downside it is overvalued by about 12%. As was said before, this valuation is under the assumption that Netflix in the future will be able to win over new subscribers and keep existing ones based on their existing content base, so their spending on new content will slow down.

Equity Value Calculation	*Units:*	
Value of supernormal growth period	*$ in th*	48.436.760
Terminal value	*$ in th*	350.559.989
Present value of terminal value	*$ in th*	118.621.573
Enterprise value	*$ in th*	**167.058.333**
(-) book value of debt	*$ in th*	10.360.058
(+) cash and cash equivalents	*$ in th*	3.794.483
Equity value	***$ in th***	**160.492.758**
Number of shares	*$ in th*	436.599
Value per share	***a.s.***	**367,60**

Table 3: Calculation of fair value per share, Base case growth, May 2019

3.6. Relative valution

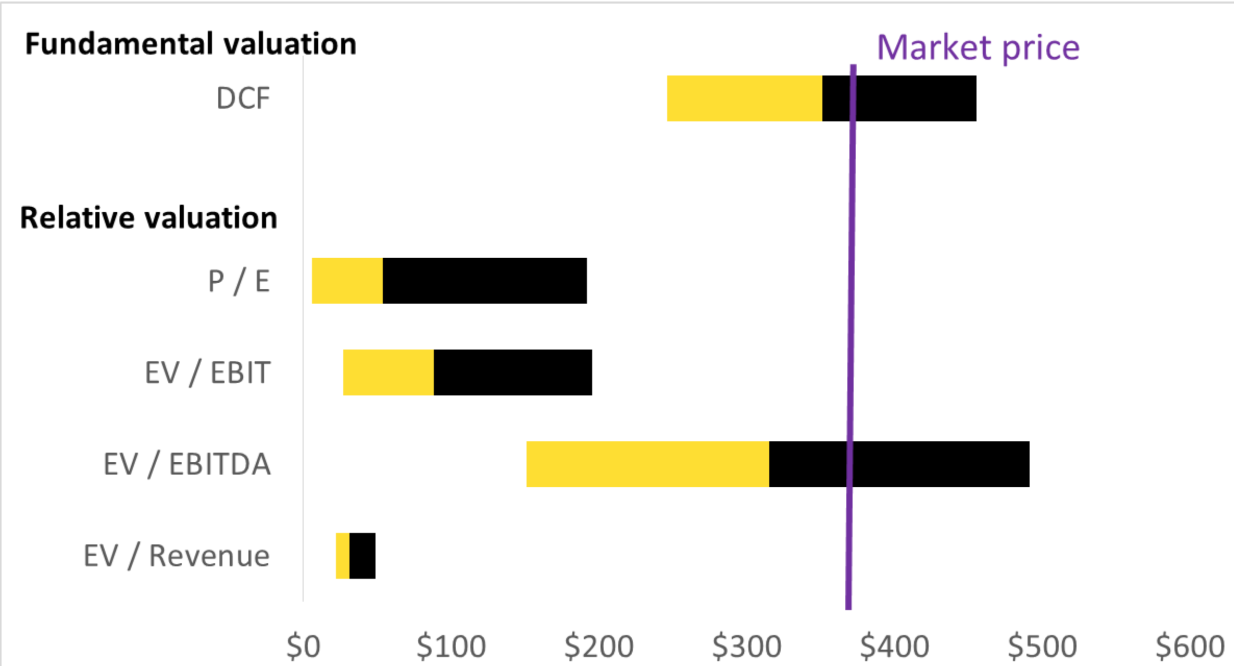
For relative valuation, four peer companies were choosen, Disney, Amazon, AT&T and Comcast. As was already stated, it is impossible to find fully comparable companies to Netflix that are traded on the stock exchange, considering its business model and growth rates, so the results from relative valuation have to be taken with reserve. Four valuation multiples were used, EV/Revenue, EV/EBITDA, EV/EBIT and P/E. Enterprise value for each of the peer companies was calculated by calculating their market capitalization and adding long-term debt, current portion of long-term debt and noncontrolling interest, while cash and cash equivalents and investments were subtracted. After that, the four valuation multiples were calculated for peer companies and then the minimum, 25th percentile, median, 75th percentile and maximum for every valuation multiple. Applying Netflix`s revenue, EBITDA, EBIT and EPS to the range of multiples, and deducting book value of debt and adding cash, a range of fair values per share was calculated. Looking at the median fair values per share, Netflix is overvalued in every case. With the most used valution multiple EV/EBITDA, it is overvalued by 38%. Detailed calculations can be found in Appendix.

	min	25th perc	median	75th perc	max
EV / Revenue	65,15	78,60	87,00	96,71	114,08
EV / EBITDA	121,12	154,84	271,97	436,53	612,52
EV / EBIT	34,78	36,34	61,94	122,91	230,57
P / E	14,24	17,48	20,41	68,27	206,29

Table 4: Range of relative fair values per share for Netflix

3.7. Valuation Summary

Netflix is fairly valued when looking at DCF valution in Base case growth, while it is overvalued when looking at all valution multiples in relative valuation. Reason for this is the problem of finding companies that are fully comparable to Netflix, since the ones choosen are already established and stable companies with low growth rates, so it is reasonable that the high-growth Netflix has much higher valuation multiples, and thus seemes overvalued compared to its peers. Since the DCF valuation is the most relevant in this analysis, Netflix`s stock has a HOLD rating at the current price, but this rating is sustanible only if Netflix will be able to cut down its spending on new content in the future.



Graph 16: Valuation summary for Netflix

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5. APPENDIX

5.1. Revenue Growth Assumptions

		2019	2020	2021	2022	2023
Domestic streaming assumptions		**2019**	**2020**	**2021**	**2022**	**2023**
Revenue	*$ in th*	8.672.827,0	9.836.720,4	11.156.808,3	12.654.052,0	14.352.225,7
Paid membership at the end of period	*# in th*	62.580,0	66.960,6	71.647,9	76.663,2	82.029,6
% change	*%*	7,00%	7,00%	7,00%	7,00%	7,00%
Base	*%*	7,00%	7,00%	7,00%	7,00%	7,00%
Upside	*%*	10,00%	10,00%	10,00%	10,00%	10,00%
Downside	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
Monthly ARPU	*$*	11,55	12,24	12,98	13,76	14,58
% change	*%*	6,00%	6,00%	6,00%	6,00%	6,00%
International streaming assumptions		**2019**	**2020**	**2021**	**2022**	**2023**
Revenue	*$ in th*	10.214.012,8	13.405.891,8	17.595.233,0	22.169.993,6	27.934.191,9
Paid membership at the end of period	*# in th*	100.966,3	126.207,8	157.759,8	189.311,7	227.174,1
% change	*%*	25,00%	25,00%	25,00%	20,00%	20,00%
Monthly ARPU	*$*	8,43	8,85	9,29	9,76	10,25
% change	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
Domestic DVD assumptions		**2019**	**2020**	**2021**	**2022**	**2023**
Revenue	*$ in th*	269.947,6	16.871,7	11.247,8	0,0	0,0
Paid membership at the end of period	*# in th*	2.000,0	1.500,0	1.000,0	0,0	0,0
% change	*%*					
Monthly APRU	*$*	11,25	11,25	11,25	0,00	0,00

Consolidated revenue		**2019**	**2020**	**2021**	**2022**	**2023**
Revenue						
Domestic streaming	*$ in th*	8.672.827	9.836.720	11.156.808	12.654.052	14.352.226
International streaming	*$ in th*	10.214.013	13.405.892	17.595.233	22.169.994	27.934.192
Domestic DVD	*$ in th*	269.948	16.872	11.248	0	0
Total Revenue	*$ in th*	**19.156.787**	**23.259.484**	**28.763.289**	**34.824.046**	**42.286.418**
% change		21,29%	21,42%	23,66%	21,07%	21,43%

		2024	2025	2026	2027	2028
Domestic streaming assumptions		**2024**	**2025**	**2026**	**2027**	**2028**
Revenue	*$ in th*	15.823.328,9	17.445.220,1	19.233.355,1	21.204.774,1	23.378.263,4
Paid membership at the end of period	*# in th*	86.131,1	90.437,7	94.959,6	99.707,5	104.692,9
% change	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
Base	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
Upside	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
Downside	*%*	4,00%	4,00%	4,00%	4,00%	4,00%
Monthly ARPU	*$*	15,31	16,07	16,88	17,72	18,61
% change	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
International streaming assumptions		**2024**	**2025**	**2026**	**2027**	**2028**
Revenue	*$ in th*	34.861.871,5	39.881.981,0	45.624.986,3	52.194.984,3	59.711.062,1
Paid membership at the end of period	*# in th*	272.608,9	299.869,8	329.856,7	362.842,4	399.126,7
% change	*%*	20,00%	10,00%	10,00%	10,00%	10,00%
Monthly ARPU	*$*	10,66	11,08	11,53	11,99	12,47
% change	*%*	4,00%	4,00%	4,00%	4,00%	4,00%
Domestic DVD assumptions		**2024**	**2025**	**2026**	**2027**	**2028**
Revenue	*$ in th*	0,0	0,0	0,0	0,0	0,0
Paid membership at the end of period	*# in th*	0,0	0,0	0,0	0,0	0,0
% change	*%*					
Monthly APRU	*$*	0,00	0,00	0,00	0,00	0,00
Consolidated revenue		**2024**	**2025**	**2026**	**2027**	**2028**
Revenue						
Domestic streaming	*$ in th*	15.823.329	17.445.220	19.233.355	21.204.774	23.378.263
International streaming	*$ in th*	34.861.872	39.881.981	45.624.986	52.194.984	59.711.062
Domestic DVD	*$ in th*	0	0	0	0	0
Total Revenue	*$ in th*	**50.685.200**	**57.327.201**	**64.858.341**	**73.399.758**	**83.089.325**
% change		19,86%	13,10%	13,14%	13,17%	13,20%

Table 5: Revenue growth assumptions, 2019 - 2028

5.2. Expenses and Cash Flow Assumptions

	Units:	2019	2020	2021	2022	2023
Cost of revenues	*$ in th*	12.552.627	14.974.472	18.157.374	21.671.907	25.959.348
Amortization	*$ in th*	9.784.125	11.793.272	14.499.651	17.463.964	21.116.091
% of revenues	*%*	51,51%	51,51%	51,51%	51,51%	51,51%
Depreciation	*$ in th*	100.000	100.000	100.000	100.000	100.000
Other	*$ in th*	2.668.502	3.081.199	3.557.722	4.107.942	4.743.256
% of revenues	*%*	15,47%	15,47%	15,47%	15,47%	15,47%
Marketing expenses	*$ in th*	2.849.202	3.434.279	4.222.394	5.085.622	6.149.145
% of revenue		15,00%	15,00%	15,00%	15,00%	15,00%
Technology and development expenses	*$ in th*	1.630.025	1.964.748	2.415.627	2.909.479	3.517.920
% of revenue	*%*	8,58%	8,58%	8,58%	8,58%	8,58%
General and administrative expenses	*$ in th*	759.787	915.808	1.125.972	1.356.166	1.639.772
% of revenue	*%*	4,00%	4,00%	4,00%	4,00%	4,00%
CAPEX	*$ in th*	15.832.124	18.169.943	20.859.935	22.919.928	25.196.921
% of revenue	*%*	83,35%	79,36%	74,10%	67,60%	61,46%
Additions to streaming content assets	*$ in th*	15.652.124	17.999.943	20.699.935	22.769.928	25.046.921
% change	*%*	20,00%	15,00%	15,00%	10,00%	10,00%
Acquisition of DVD content assets	*$ in th*	30.000	20.000	10.000	0	0
Purchases of property and equipment	*$ in th*	150.000	150.000	150.000	150.000	150.000

	Units:	2024	2025	2026	2027	2028
Cost of revenues	*$ in th*	30.880.258	34.988.972	39.663.222	44.982.607	51.038.109
Amortization	*$ in th*	25.303.433	28.565.127	32.261.362	36.451.478	41.203.062
% of revenues	*%*	51,51%	51,51%	51,51%	51,51%	51,51%
Depreciation	*$ in th*	100.000	100.000	100.000	100.000	100.000
Other	*$ in th*	5.476.825	6.323.844	7.301.859	8.431.129	9.735.047
% of revenues	*%*	15,47%	15,47%	15,47%	15,47%	15,47%
Marketing expenses	*$ in th*	4.912.351	5.545.569	6.263.148	7.076.608	7.999.069
% of revenue		10,00%	10,00%	10,00%	10,00%	10,00%
Technology and development expenses	*$ in th*	4.215.527	4.758.922	5.374.711	6.072.780	6.864.389
% of revenue	*%*	8,58%	8,58%	8,58%	8,58%	8,58%
General and administrative expenses	*$ in th*	1.964.941	2.218.228	2.505.259	2.830.643	3.199.628
% of revenue	*%*	4,00%	4,00%	4,00%	4,00%	4,00%
CAPEX	*$ in th*	26.449.267	27.764.230	29.144.942	30.594.689	32.116.923
% of revenue	*%*	53,84%	50,07%	46,53%	43,23%	40,15%
Additions to streaming content assets	*$ in th*	26.299.267	27.614.230	28.994.942	30.444.689	31.966.923
% change	*%*	5,00%	5,00%	5,00%	5,00%	5,00%
Acquisition of DVD content assets	*$ in th*	0	0	0	0	0
Purchases of property and equipment	*$ in th*	150.000	150.000	150.000	150.000	150.000

Table 6: Expenses and cash flow assumptions, 2019 – 2028

5.3. Relative Valuation

	NFLX	DIS	AMZN	T	CMCSA
EV / Revenue	9,58	3,01	3,68	2,28	2,79
EV / EBITDA	16,48	19,29	30,83	6,67	8,88
EV / EBIT	94,22	28,55	68,91	14,45	13,87
P / E	119,44	12,34	82,27	10,72	13,71

Table 7: Valuation multiples for Netflix and its competitors

$ in mil, except share price	NFLX	DIS	AMZN	T	CMCSA
EV	151.240	179.088	855.870	388.832	263.612
(+) market equity value	144.674	161.204	828.730	213.981	162.677
2018 average monthly price	321	107	1.657	31	35
diluted nimber of shares	451	1.507	500	6.806	4.636
(+) long-term debt	10.360	17.084	68.390	166.250	107.345
(+) current portion of LT debt	-	3.790	-	10.255	4.398
(+) noncontrolling interest	-	4.059	-	9.795	889
(-) cash and equivalents	3.794	4.150	31.750	5.204	3.814
(-) investments	-	2.899	9.500	6.245	7.883
2018 Revenue	15.794	59.434	232.887	170.756	94.507
2018 EBITDA	9.179	9.283	27.762	58.298	29.685
2018 EBIT	1.605	6.272	12.421	26.906	19.009
2018 Earnings	1.211	13.066	10.073	19.953	11.862

Table 8: Calculation of enterprise value for Netflix and its competitors

Multiple ranges	min	25th perc	median	75th perc	max
EV / Revenue	2,28	2,66	2,90	3,18	3,68
EV / EBITDA	6,67	8,33	14,09	22,18	30,83
EV / EBIT	13,87	14,31	21,50	38,64	68,91
P / E	10,72	11,93	13,03	30,85	82,27

Table 9: Ranges of valuation multiples

NFLX EV, in mil $	min	25th perc	median	75th perc	max
EV / Revenue	35.966	42.033	45.824	50.205	58.045
EV / EBITDA	61.218	76.436	129.290	203.545	282.963
EV / EBIT	22.261	22.964	34.516	62.028	110.608
P / E	12.990	14.455	15.778	37.371	99.652

Table 10: Ranges of enterprise value for Netflix

NFLX Equity Value, in mil $	min	25th perc	median	75th perc	max
EV / Revenue	29.400	35.468	39.258	43.640	51.479
EV / EBITDA	54.653	69.870	122.725	196.979	276.398
EV / EBIT	15.695	16.398	27.951	55.463	104.043
P / E	6.424	7.890	9.212	30.806	93.086

Table 11: Ranges of equity value for Netflix

NFLX Value per Share, in $	min	25th perc	median	75th perc	max
EV / Revenue	65,15	78,60	87,00	96,71	114,08
EV / EBITDA	121,12	154,84	271,97	436,53	612,52
EV / EBIT	34,78	36,34	61,94	122,91	230,57
P / E	14,24	17,48	20,41	68,27	206,29

Table 12: Ranges of fair value per share for Netflix

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