A Work Project, presented as part of the requirements for the Award of a Master Degree in Economics / Finance / Management from the NOVA – School of Business and Economics.

EQUITY RESEARCH | Netflix Inc. (NFLX)
Netflix's Gambit of Original Content

ANA ISA RODRIGUES – MSc FINANCE
40870

A Project carried out on the Master in Finance Program, under the supervision of:

Professor Francisco Martins

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Abstract

The present report serves to expose the current and future Netflix's state, plus the market and competition analysis. Additionally, there is a special focus placed on 2020 year, due to the global pandemic circumstances, where the impact it is included on valuation. Subsequently, considering the implicit risks, it was possible to reach a target share price of $605 by the end of 2021. Nevertheless, some sensitivity analyses were carried out in order to recognize the share price variation according to certain assumptions.

Keywords

- Covid-19
- Competitors
- 5 G
- Original Content

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This report is part of the “Netflix, or the art of modern-day entertainment” report (annexed) and should be read has an integral part of it.

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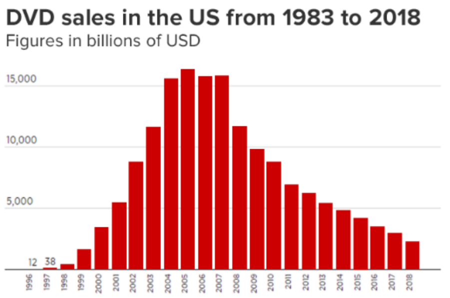

Figure 1: DVD sales in the US from 1983 to 2018 (in billions of USD)
Source: CNBC.

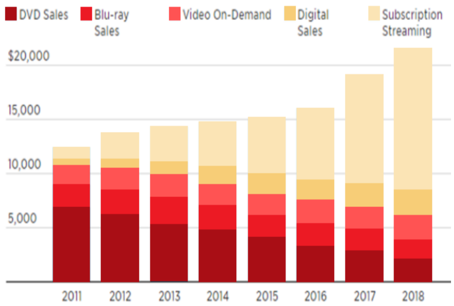

Figure 2: Market share of the US home video market (in billions of USD)
Source: CNBC.

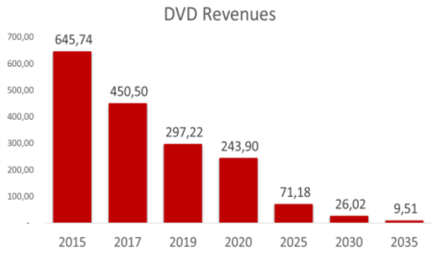

Figure 3: Netflix's DVD Sales (in millions) from 2015 to 2035.
Source: Company data, Forecast.

DOMESTIC DVD FORECAST

During 2001 and 2005, the DVD market grew sharply due to consumers' preference for more practical and better-quality devices than VHS. In 2005 this market got $16.3 billion in sales and represented 64% of the US home video market. After the DVD boom, this sector started declining, especially with the rise of more advanced technologies. In the last 13 years, sales fell by more than 86%. Several reasons triggered this drastic reduction, such as the great recession that happened in the following years, consumers' shift to buying digital online films, and finally, the introduction of streaming services. Since 2011, streaming platforms have recorded an increase in sales of 1,231%, to $ 12.9 billion. In the meantime, DVD sales continued to fall even more abruptly. In 2018, the US home video market percentage was less than 10%, reaching a value of $ 2.2 billion[1].

In addition to the decrease in DVD sales, a similar trend was observed with other related devices such as DVD players used to play DVDs. From 2014 to 2019, the revenues of DVD players in the US decreased from $305 million to $77 million, dropping more than 70% in 5 years, according to Consumer Technology Association. Consequently, DVDs' utilization has declined as new computers no longer come with a DVD drive causing a diminishing growth of this market.

Considering the new Starlink project, founded by Elon Musk, significant improvements in the speed of the Internet are expected to reach more locations, which leads us to believe that the total number of subscriptions to streaming services will increase, with a more noticeable reduction in DVDs' usage in the next few years[2]. The accelerated development of technology gives consumers access to better quality and valuable video services, making DVDs more obsolete. Thus, in this segment, we expect that sales revenue, services, and equipment associated with this old technology will continue to decrease.

REVENUES FORECAST

Average Revenue Per User (APRU)

Current average price		
U.S.A	$	13.84
Canada	$	9.83
EMEA	$	10.88
LATAM	$	7.27
APAC	$	9.20
DVD	$	11.44

Figure 4: Monthly Subscriptions costs for U.S. Streaming Services.
Source: IGN.

The average revenue per user (APRU) is another important revenue driver for Netflix and it is expressed per month since subscriptions are paid monthly. There are three main types of membership plans that are proposed on the streaming platform. However, the standard plan is the most popular offering that users tend to choose. Currently, the US subscribers pay $8.99 for the basic plan, $13.99 for the standard, and $17.99 for the premium. Comparing the prices in 2019 with other competitors, Netflix has the second highest average price in the United States, after HBO max, with a monthly subscription price of $14.99. The company intends

[1]Source: CNBC 'The death of the DVD: Why sales dropped more than 86% in 13 years', Nov. 2019.
[2]Source: Bloomberg 'Elon Musk's Next Big Thing Is 40,000 Satellites Beaming Broadband', Sep. 2020

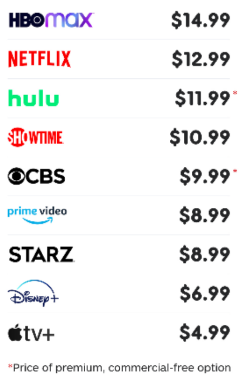

Figure 5: The average monthly payment per membership in Q3 2020 of each region and DVD.

Source: Our estimates.

to increase its prices even higher to be able to offer its customers better contents with superior quality. Contrary, looking at the lowest prices in the market, we can identify two other strong players, which are Disney plus, with $6.99 and Apple TV with $4.99 per month. Since these two companies have competitive fees, while still bringing new content to the market, this will help boost their market share in the next few years, mainly Disney +, which already accounts for 74 million subscribers (38% of the total number of Netflix's subscriber) in 2020, since its launch in November 2019.

Netflix has different pricing strategies for each region depending on the specific characteristics of each area. However, our prediction of the ARPU's continued growth applies to all countries, some more than others, becoming stable in the long-term. The calculation of this driver is based on the real growth rate of previous years adjusted for inflation. Therefore, we considered the Consumer Price Index rate of the world since Netflix's service is present around the globe. It is projected, during the next years, a continuous increase of Netflix's prices in the UCAN for two main reasons; first, to compensate for the slowing subscribers' growth in this region, and second, to be able to increase its spending on the original production. Following this analysis, we projected a sustained growth of the ARPU in North America that we believe will stabilize starting from 2025, around $14 for the US and $10 for Canada.

Due to this year's events, many people were unemployed or had a drop in their incomes, which means that consumers are unwilling to pay a high price for streaming services; instead, they opt for cheaper plans. Moreover, we can observe this circumstance in the regional breakdown section of Netflix's financial reports, wherein the first half of this year, the average monthly revenue per membership decreased in almost all regions, mainly in emerging areas, such as Latin America ($7.47) and Pacific-Asia ($9.07)[3]. For this reason, we considered this impact until 2023 by reducing the real growth rate that we applied for these two specific regions. Africa is also an emerging continent; however, it is difficult to reflect its isolated effect from Europe and the Middle East as it is part of the EMEA region. Considering this, we suppose the ARPU of this area will have a relatively lower growth rate adjusted to inflation until 2023, reaching an average price of $11.78 in 2025.

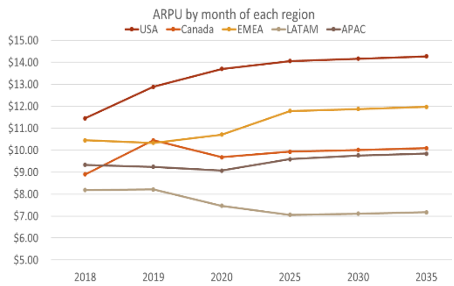

Figure 6: ARPU in dollars by month of each region from 2018 to 2035.

Source: Company data, Forecast.

Finally, regarding DVD prices, which are currently at $7 per month, we assumed a constant growth adjusted to inflation from 2020 to reflect the expected decline of this segment and because the price was overall stable during the last years.

[3]Source: Statista 'Video on demand ARPU', 2020

Revenues

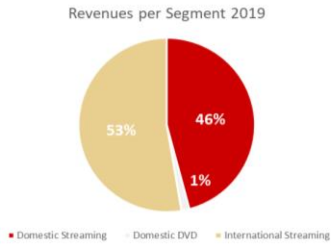

Figure 7: Netflix's revenues divided by segment from 2019 (in percentage).

Source: Company data.

Since 2016, Netflix's revenues have grown at an annual average growth rate of 31%, reaching over $20 billion at the end of 2019. The company's primary source of income was mostly generated from the domestic streaming segment. However, the international market returns in 2019 have surpassed the US revenues for the first time, becoming the leading source of income with 53% of total revenues. One of the most important regions driving this global growth is EMEA with $5.5 billion, representing around 48% of international revenues.

The enormous growth of subscribers in the first half of 2020 has boosted the company's earnings by 26% compared to the same period in the previous year ($9.4 billion in 2019 vs $11.9 billion in 2020). According to our analysis, since we predict a slowdown in paid memberships in the short term, we expect that revenues' growth will stagnate as well. Overall, revenues will continue growing in most countries during the upcoming years. North America will maintain its lead in terms of generated income ($12.7 billion expected in 2021), followed by EMEA ($9.8 billion), Latin America ($3.6 billion), and finally Asia Pacific ($3.2 billion), representing a total of $29.2 billion.

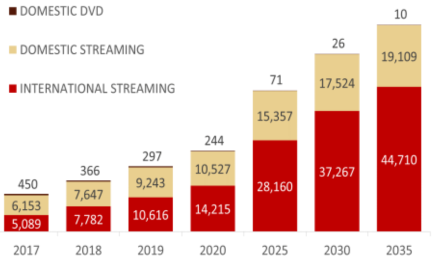

Figure 8: Netflix's revenues divided by segment from 2017 to 2035 (in millions).

Source: Company data, Forecast.

While streaming earnings will maintain their uptrend, DVD revenues will continue falling in the next years, representing less than 1% of total earnings. Even though the domestic DVD segment is diminishing, it will remain profitable for the next few years. Corresponding to our forecast for 2035, we believe that Netflix will be able to achieve almost $65 billion in total revenues.

CONTENT AND COSTS FORECAST

Content Assets and Liabilities

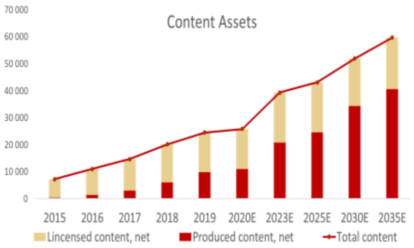

Figure 9: Total content assets projections to Netflix from 2015 to 2035, divided by licensed and produced content.

Source: Company data, Forecast.

In congruence with the financial accounting standards for streaming content, Netflix started following the ASC 920: Entertainment – broadcasting guidance in 2007 to acquire the streaming rights from content providers (licensed content). In 2016, the company started applying the ASC 926: Entertainment – Films as well for their own produced content and intellectual property. This accounting standard was updated in 2019, the ASU 2019-2, causing the exclusion of the "current content assets" caption from Netflix's Annual reports and including its values in the "non-current content assets" caption[4].

Netflix has been massively increasing its content assets in the last years, reaching a total of $25.8 billion in 2020. However, this value is much lower than Netflix's expectation for this year, mainly due to the compulsory halt of content production around the world caused by the pandemic lockdowns. Since there are many

[4]Source: Netflix, 'Overview of Content Accounting', Jan. 2020.

delayed investments involved, we believe that we will see substantial growth in content assets in the upcoming years compared to 2020, reaching $39.8 billion by 2023. After that, we expect this growth to stabilize at an average rate of 4% reflecting the evolution of the real Gross Domestic Product (GDP) growth rate[5].

Currently, 42% of the total streaming content is produced by Netflix (original content), increasing by 135% since 2016. This surge is matched with a much slower growth of licensed content, valued at $14.9 billion in 2020. In our forecast, we assume that the original content value will outweigh the licensed content starting from 2023 for two main reasons; The first one is that Netflix is clearly committed to funding more original productions, which have had great success during the last years[6]. The second aspect is that several entertainments companies like Warner Media and Disney are starting to enter the video streaming industry and plan to retrieve their licensed series and movies from Netflix's library to include them in their new platforms.

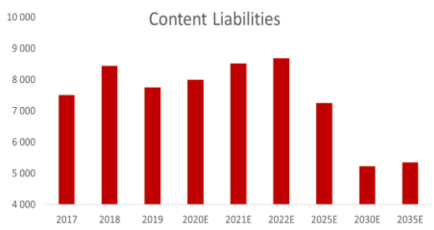

Figure 10: Netflix's Content Liabilities from 2017 to 2035 (in millions).
Source: Company data, Forecast.

Since content liabilities correspond to the streaming content obligations, this item is expected to follow the same trend as licensed content. In 2019, some of the content liabilities were denominated in currencies other than the US dollar, reaching a total value of $7,7 billion. DVD content liabilities ceased to be classified in the consolidated statement of balance sheets as "Current/non-Current content liabilities" and is now included with "Accrued expenses and other liabilities" for current obligations and "Other non-current liabilities" for non-current charges.

Overall, we assume a continuous decrease in the total content liabilities, especially with the expiration of licensing contracts, starting from 2022, where it reaches a maximum value of $8,7 billion (47% of licensed content), and we expect it to reach $5.5 billion by 2035.

Cost of Revenues

Most of Netflix's cost of revenues is comprised by the amortization of streaming content assets, the main part (>80%), and other expenses related with the production and acquisition of content. In our valuation, we decided to divide this caption into three different components: the licensed content amortization, the produced content amortization, and other costs, which include different operational expenses such as payroll and personnel costs, streaming delivery costs, customer service costs, agreements with specific content creators and music rights, and other expenses associated with the production of original programs.

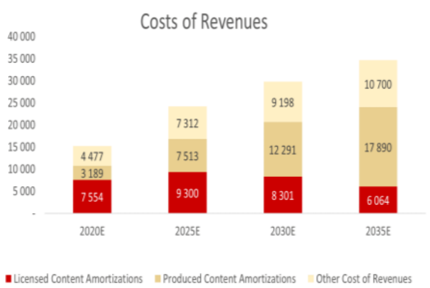

Figure 11: Netflix's Cost of Revenues from 2020 to 2035 (in thousands).
Source: Forecast.

The amortization cost of licensed and produced streaming content is revised each quarter, and it is estimated based on its historical and viewing patterns, starting

[5]Source: Congressional Budget Office 'An Update to the Economic Outlook: 2020 to 2030, Jul. 2020.
[6]Source: Netflix Meeting in the 3rd quarter of 2020.

with the first month of its disposal on the platform. The amortization cost is calculated on an accelerated basis, where more than 90% of streaming content is estimated to be amortized over a 4-year period after its launch. However, this amortization methodology seems to be subjective as Netflix does not clearly explain how they amortize their content in detail, plus previous viewing patterns may not reflect future content's success. In fact, the more Netflix accelerates the time horizon it amortizes its content, the less profitable the company will appear on an income statement basis. If we look at Figure 12 we can see that the cash spends on content is much higher than the amortization costs reported on the company's consolidated statements of operations. Hence, investors need to consider this when valuing Netflix, especially in the case where subscriptions' growth starts declining.

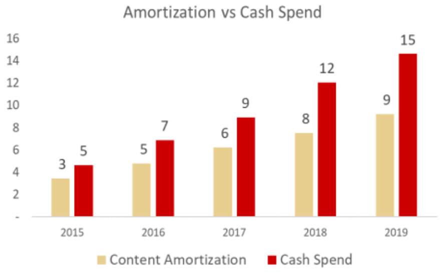

Figure 12: Netflix's spending on content compared to the amortization costs form 2015-2019 (in billions).

Source: Netflix's Annual Reports

The total streaming costs are expected to reach $15,1 billion in 2020, with almost $10 billion for the international streaming segment and $5.1 billion for the domestic streaming segment. In our analysis, we predict a continuous growth of cost of revenues in the future, surpassing $20 billion in 2026. In the annual report of 2019, Netflix decided to remove the "DVD amortization" caption and reclassify it into "Other non-cash items" within the cash flows from operating activities. As we previously mentioned in this report, the domestic DVD segment is expected to deteriorate in the next few years. Consequently, DVD costs will decline as well at an average annual rate of -26%, reaching $74 million in 2025 (compared with $121 million in 2020)[7].

Other Expenses

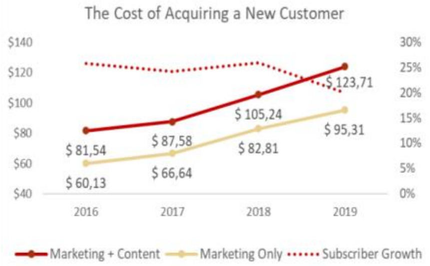

Figure 13: Netflix's cost of acquiring a new customer from 2016-2019

Source: Netflix's Annual Reports

In addition to the costs of revenues, there are also other costs related to the company's core business, such as Marketing expenses, Technology and Development costs, and General and Administrative costs.

Netflix's marketing strategy is mainly focused on promoting its streaming service and is no longer directed to the DVD segment. The company has been able to revolutionize and set itself apart from its competitors through very effective advertising and communication campaigns. In the last few years, marketing expenses have been increasing as Netflix continues developing its marketing plans to grow its brand internationally and maintain a strong image locally. In 2019, these costs have totalled $2.6 billion, representing more than 13% of total revenues. Although we believe that Netflix will increase its marketing expenses in the upcoming years, reaching $3 billion in 2023, we expect a slowdown in 2020 ($2 billion) due to the interruption of certain campaigns.

[7]Source: Netflix financial report of 2019.

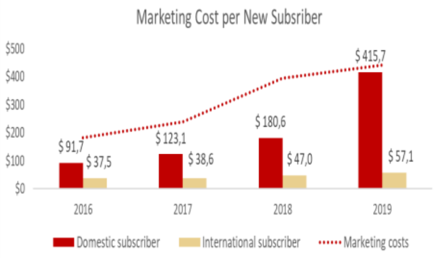

Figure 14: Netflix's marketing cost of acquiring a new customer per region from 2016-2019

Source: Netflix's Annual Reports, Our Estimates.

The continuous growth of marketing spends indicates an increase in the acquisition cost of new customers. As we can see from Figure 13, this cost has increased from $60.53 in 2016 to $95.31 in 2019. In addition, the marketing cost for domestic subscribers is higher than international ones, due to the slowdown of subscribers' growth in the US (Fig. 14). However, we believe that adding a part of content expenses to this metric would give us a more accurate measure of Netflix's cost of acquiring subscribers. As an approximation, we decided to consider 20% of the company's negative free cash flow to represent the amount invested in content to attract future customers. Thus, the real acquisition cost of a new user is higher than what it seems, $123.7 in 2019.

Concerning the technology and development costs, we expect a similar growth trend as for marketing, increasing from $1.5 billion in 2019 to $3.2 billion in 2025. These costs are mainly associated with payroll, improvements of the services offered, modification and maintenance of the user interface, streaming delivery technology, and third-party expenses which include cloud computing costs.

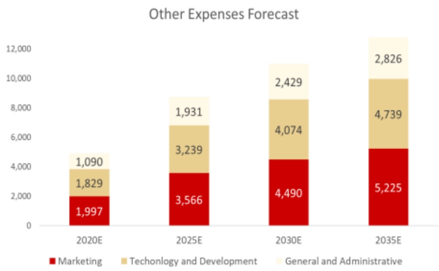

Figure 15: Other expenses (Marketing, Technology and Development, General and Administrative) in thousands from 2020 to 2035 of Netflix.

Source: Forecast.

Lastly, the general and administrative expenses have also been rising over the years as the company continues expanding its offices in different countries. This caption consists of payroll, professional fees, contractors and consultants' expenses (which reached $ 40 million in 2019), and other general corporate costs. In 2019, the general and administrative total costs was around $914 million, and we expect it to attain $1.9 million by 2025.

Income Taxes

The statutory tax rate in the US is at 21%, most of the time, the company does not pay the underlying tax rate, but rather the effective tax rate, due to certain legal adjustments. As of April 2019, in relation with tax cuts and the job act, the global corporate structure was modified, but did not have a strong fiscal impact. In 2019, there was an increase in the effective tax rate of 9% ($195.3 million) due to the corporate structure simplification, less benefit from recognizing excess tax benefits of stock-based compensation and less benefit from Federal and California credits of research and development. During the second quarter of 2020, when the pandemic started, the effective tax rate (30%) was higher than the statutory rate (21%), which was mainly caused by the improvement of foreign earnings at other than US rates with a positive value of $152,2 million. In 2020, we expect the effective tax rate to increase to 18%, representing an income tax of $628.4 million. In long-term view we are assuming no relative adjustments that could impact the effective tax rate, therefore we believe this rate will become closer to the statutory one. Additionally, the core business taxes, and the tax shield values will increase

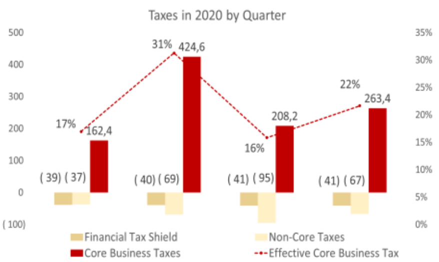

Figure 16: Taxes by core, non-core, financial tax shield and Effective Core business tax, in 2020 by quarter.

Source: Company data, Forecast.

in subsequent years, reaching $3.68 billion and $509.9 million in 2035, respectively.

VALUATION

Relative Valuation

As a benchmark for our comparative analysis, we considered multiple companies present in the media and entertainment sector which are: Walt Disney (Disney+, Hulu, and ESPN+), Amazon (Prime Video), AT&T (HBO), Viacom CBS (CBS All Access), Comcast Corp. (Peacock), Discovery Inc., and Fox Corp.

NFLX stock price is considered expensive compared to its competitors, but it is also showing rapid growth during the past years and a great potential to expand its business in the future. As of December 2020, Netflix had the third highest P/E ratio of 71.11 followed by Amazon (94.76) and Disney (148.68), indicating investors' expectations for higher returns. From this perspective, if we look at the profitability ratios of these companies, it appears that Netflix is superior in almost all indicators. In fact, the company had the highest ROE ratio among its peers with 39.48, which has been increasing progressively since 2016 (14.17). Along with the ROE ratio, Netflix performed very well in terms of ROIC and ROA where it scored 18.44% and 9.76%, respectively. Compared to Disney's results, these ratios were relatively low (3.8% ROIC and 1.08% ROA), mainly due to the acquisition costs of TFCF ($69.5 billion) and the related expenses to Disney plus launch. Nonetheless, Netflix's results are still considered higher than the average industry rates (11.9% ROIC and 7.1% ROA). This improvement has resulted in EBITDA growth of 81.6% since 2019. Despite this increase, Netflix's EBITDA margin of (19.89) is still lower than its competitors where Discovery Inc. had the best value (39.75) followed by AT&T (35.93) and Comcast Corp. (31.04).

Ticker	Beta	Sales Growth	ROIC	ROE	ROA
NFLX US	1.02	26.19%	18.44%	39.48%	9.76%
DIS US	1.05	-6.08%	3.8%	2.5%	1.1%
DISCA US	1.39	-7.50%	14.4%	25.6%	6.6%
VIAC US	1.07	-3.79%	8.8%	12.8%	4.9%
FOXA US	1.03	7.28%	14.5%	24.4%	12.0%
T US	0.90	-5.20%	5.4%	9.4%	3.1%
CMCSA US	0.90	-3.82%	8.0%	13.8%	4.3%
AMZN US	0.72	31.07%	10.86%	24.95%	7.22%
Median	**1.0**	**-3.8%**	**9.8%**	**19.1%**	**5.7%**
Mean	**1.0**	**4.8%**	**10.5%**	**19.1%**	**6.1%**

Ticker	P/E	EBITDA Growth (%)	EBITDA Margin	EV/EBITDA
NFLX US	56.48	81.60	19.89	48.69
DIS US	45.60	-11.80	22.60	18.73
DISCA US	6.74	-11.55	21.41	6.55
VIAC US	6.76	-10.74	39.75	6.18
FOXA US	13.89	14.30	25.62	6.43
T US	13.00	-3.33	35.93	6.40
CMCSA US	20.81	-6.10	31.04	9.58
AMZN US	94.76	30.60	13.88	33.05
Median	**17.35**	**-4.72**	**24.11**	**8.07**
Mean	**32.25**	**10.37**	**26.27**	**16.95**

Figure 17: Financial ratios of Media and entertainment industry players.

Source: Bloomberg.

Looking at the Enterprise Value multiples, we can see that Netflix and Amazon are taking the lead in terms of EV/EBITDA multiple of 48.7x and 33.05x, respectively. This is explained by the upsurge of their share stock, both reaching an all-time high during this year. Contrary, the other remaining firms such as Viacom CBS and Discovery Inc. had much lower EBITDA multiple where they scored 7.1x and 7.3x, respectively, which is slightly lower than the average of the sector (9.1x). During this current situation, many companies have seen their sales growth decline compared to previous periods like Discovery (-7.5%), Disney (-6.08%), and AT&T (-5.2%). On the other hand, Netflix and Amazon have demonstrated great returns of 26.19% and 31.07%, respectively.

Finally, the average beta of our benchmark was equal to 1, which is close to the average beta of the entertainment industry 1.33 (107 companies) in the last five years, according to Damodaran [(8)(9)]. The current betas of our comparable companies show relatively similar values among each other, ranging between 0.72 and 1.39.

Giving the multiples presented above, it seems that Netflix is performing well compared to its competitors, indicating an effective use of its resources and a healthy growth potential.

Intrinsic Valuation

▪ Adjusted Present Value (APV)

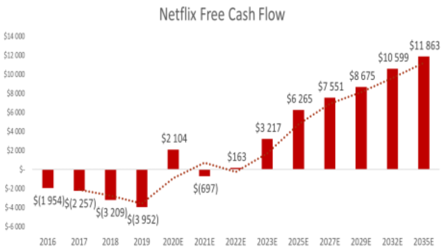

Figure 18: Netflix's Free Cash Flow 2020 to 2035.
Source: Forecast.

In our intrinsic valuation, we decided to apply the Adjusted Present Value model, as it better reflects our future expectations and assumptions regarding the business and shows the benefits of tax shields[10]. In addition to these reasons, as we decided to use a target capital structure that the company intends to reach in the future (22.5%), which is higher than the current value (around 6%), we believe that this method is what best fits this situation, being more accurate and considers the tax shield value. For the enterprise value calculation, we used the unlevered core free cash flow since the weight of non-core cash flow is much lower than the core one and because it gives a better valuation of the core activity of Netflix. To discount the company's unlevered FCF and tax shields, we used the unlevered cost of capital. This valuation method has yielded an Enterprise value of $284.9 billion in 2021 and an Equity value of $267.4 billion after subtracting $17.58 billion of net debt, which is present in the balance sheet with the designation of financial result (long- and short-term debt minus excess cash), from the total EV in 2021.

▪ Growth rate and ROIC

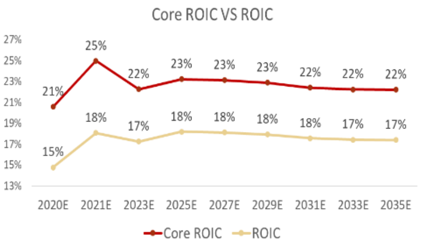

Figure 19: Licensed and produced Return on Invested Capital of Netflix from 2016 to 2035.
Source: Forecast.

The terminal growth rate in 2035 is 2.9%, which is the rate we used as perpetuity growth for the APV calculation of the terminal value. Furthermore, we believe that Netflix will reach its steady state in 15 years from now where different values, such as revenues' growth, return on invested capital (ROIC), return on new invested capital (RONIC), and reinvestment rate (RR) will start to stabilize, resulting in a growth rate close to the GDP. The perpetuity growth rate was calculated based on a ROIC rate of 22.2% and RR of 13% in 2035, which in the last five years did not show large changes. The year in which these components show greater strength is 2021, where ROIC reaches 25% and RR 114%, mainly because the core cash

[8]Source: Bloomberg, Netflix multiples.
[9]Source: Damodaran, betas of industry.
[10]Source: Investopedia, Adjust Present Value, April 2020.

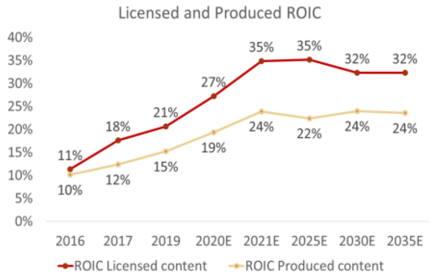

Figure 20: Netflix's Return on Invested Capital from 2020 to 2035.
Source: Forecast.

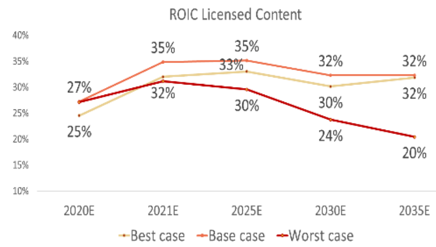

Figure 21: Licensed ROIC scenarios from 2020 to 2035.
Source: Forecast.

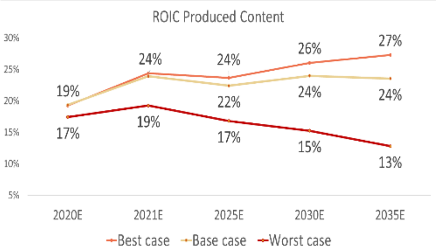

Figure 22: Produced ROIC scenarios from 2020 to 2035.
Source: Forecast.

flow in 2020 is positive, and the company has delayed all its investments for the upcoming years to compensate for the damage done by the pandemic. However, from 2021 onwards, both ratios are expected to decline over the years and stabilize at the end of the period[11].

To evaluate Netflix's strategic move of increasing original content, we decided to analyse the ROIC of produced content compared to the licensed one. According to previous studies, licensed content accounted for 84% of Netflix's total viewership in 2016 (vs 16% for original content)[12]. This rate has been decreasing in past years as original series continue to gain more popularity and views. Despite this growth, licensed content is still maintaining the lead in terms of total streams, around 56% (vs 44% for original content), in 2019. Considering this information, we found that the ROIC of licensed content has increased from 11% in 2016 to 21% in 2019. Similarly, the ROIC of produced content has also increased but at a lower rate, from 10% in 2016 to 15% in 2019, which is mainly due to Netflix's continued investment of its productions. In the long term, we considered two different scenarios based on the future success of original content. In the case where produced content will gain higher success, we expect its ROIC to reach 27% in 2035, compared to 32% for the licensed content for the same period. The reason why licensed content ROIC will remain higher in this case is because production costs, which are mostly paid upfront, are much higher than the annual licensing fees. In the opposite scenario, where Netflix's originals will fail to attract subscribers, the produced content ROIC will decline over the years, reaching 13% in 2035 compared to 20% for licensed ROIC. This decrease is mainly attributed to the loss of the number of subscribers along with the high investment amount that has already been incurred in the past.

- ## Discount Rate

To discount the company's core free cash flows, we used the unlevered cost of capital (Ru), which is equal to 5.55%. The capital cost of equity (Re) was estimated using the Capital Allocation Pricing Model (CAPM). We obtained a rate of 6.49%, assuming a risk-free rate of 0.9%, retrieved from Bloomberg[13]. According to McKinsey and company book, the market risk premium estimation, which is based on the correlation of global market indexes and the S&P500 (being a good proxy), has resulted in a rate that ranges between 4.5% and 5.5%[14]. However, with the pandemic, Duff and Phelps have predicted an economic crisis with increased volatility and, consequently, a rise in equity risk premium from 5% to 6%[15]. Thus,

[11]Source: eMarketer, 'Users Still Demand Licensed Content from OTT Platforms', 2019.
[12]Source: The variety, 'Netflix Licensed Content Generates 80% of U.S. Viewing, Study Finds', 2018.
[13]Source: Bloomberg, Risk Free Rate.
[14]Source: McKinsey and company book, MRP.
[15]Source: Duff & Phelps 'Recommended U.S. Equity Risk Premium Increased from 5.0% to 6.0%', March 2020.

Assumptions

Tax rate	21%
Rf	0,90%
MRP	5,50%
βe	1,02
Re	**6,49%**
YTM	2,07%
Ba3 (10y)	16,72%
LGD	53,90%
Rd	**1,35%**
Perpetuity growth	3%
βd	0,08
βu	0,85
Ru	**5,55%**

Figure 23: Valuation assumptions.

Source: Bloomberg, Moody's, Mckinsey Book, and our estimates.

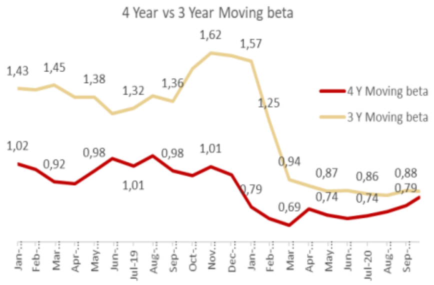

Figure 24: 4-year vs 3-year moving beta.

Source: Forecast.

	D/E				
$605,21	6%	14%	20%	22,5%	25%
Growth 2%	388,19	431,85	465,92	480,32	494,84
2,5%	429,58	483,39	526,25	544,60	563,25
3%	466,79	530,76	582,70	605,21	628,25
3,25%	517,23	596,64	662,85	692,04	722,24
3,5%	557,52	650,68	730,06	765,57	802,64

Figure 25: Price sensitivity on Ru and Perpetual Growth rate

Source: Forecast.

considering historical values, the present and possible future situation, we assumed a Market Risk Premium of 5.5%. For the capital structure, since Netflix expects to achieve its optimal D/E ratio in the future, which ranges between 20% and 25%, we decided to use a mean value of 22.5% to be reflected in Netflix's future beta and upcoming tax shields[16].

The equity beta (βe) was obtained from the regression of Netflix stock (NFLX) over the S&P500 index (SPX500), which yielded a beta of 0.97, close to the market beta. The sample period of this metric is 5-years monthly data[17]. To better understand the stock's systematic risk, we calculated the 3-year and 4-year rolling beta, which both indicated a clear downtrend. This decline conforms to our vision regarding the industry and how it is evolving. Many factors can explain the decreasing equity beta of Netflix. We can state the continued technological advancement, the increase of internet users worldwide, and consumers' changing lifestyles and habits. However, the obtained beta has the lowest value among Netflix's competitors and the entertainment industry. Therefore, we decided to increase our obtained beta to 1.02 to get a better estimate. As expected, the cost of debt is much lower than that of equity, being 1.35%. This value was found based on a probability of default (16.72%), a loss given default (53.9%) (Netflix's credit bonds are rated Baa3 by Moody's Investors Service) and a yield-to-maturity (2.07%), which was achieved from the calculation of the yield of all current Netflix's bonds [18](19).

ANALYSIS

Sensitivity Analysis

Given the assumptions made to compute the Equity Value of the company, it is relevant to conduct a sensitivity analysis on different variables used in the valuation to understand further how a change in our input values will affect our target share price. For this purpose, we decided to run a sensitivity analysis of our unlevered cost of equity (Ru), which was used as a discount rate for Netflix's core cash flows. Taking into consideration the possible variations of Ru components, we determined an interval that ranges between 5% and 5.9%. We also added the perpetual growth rate in another axis, varying between 2% and 3.5%. In the worst case, meaning the highest unlevered cost of capital and lowest growth rate, the share price will be $426.71, and in the best case, the price will reach $1,089.67.

[16]Source: Interview with the Netflix's CEO.
[17]Source: Bloomberg, Returns of market and Netflix.
[18]Source: Bloomberg, Netflix's Bonds.
[19]Source: Moody's report.

Growth \ Ru	5,0%	5,3%	5,6%	5,6%	5,9%
$605,21					
2%	590,71	525,92	480,32	472,11	426,71
2,5%	690,13	603,66	544,60	534,11	476,99
3%	789,74	678,79	605,21	592,32	523,09
3,3%	946,94	792,11	693,95	677,11	588,37
3,5%	1 089,67	889,81	767,97	747,44	640,92

Figure 26: Price sensitivity on D/EV and Perpetual Growth rate

Source: Forecast.

MRP \ βe	0,77	0,87	1,02	1,10	1,20
$605,21					
5%	1 415,18	1 041,29	735,99	626,39	526,96
5,25%	1 245,71	930,32	665,08	568,13	479,36
5,50%	1 110,10	838,88	605,21	518,49	438,48
5,75%	999,13	762,25	554,00	475,71	403,01
6%	906,67	697,11	509,70	438,48	371,95

Figure 27: Price sensitivity on Beta and Market Risk Premium

Source: Forecast.

The second sensitivity analysis that we considered, is related to the company's capital structure (D/E). Since we are assuming a target Debt to Enterprise ratio to calculate the unlevered beta (βu), we thought it would be important to test multiple values from 6% to 25%. With a 3% growth rate, our share price would be between $466.79 if we use the current D/E ratio and $628.25 for a D/E of 25%.

Finally, we made a sensitivity analysis on the equity beta and the market risk premium. As it is difficult to find data about Netflix's direct competitors, we decided to run a price sensitivity analysis on the company's beta (βe) with an interval between 0.77 and 1.2. Regarding the MRP, as mentioned before, the commonly used rate is around 4.5 and 5.5. However, with the unexpected pandemic situation and increased uncertainty, we slightly increased this range to reflect the underlying risks. Since both these factors are connected to market risk, an increase in one of them will negatively impact the price.

Scenario Analysis

- ### Best Case Scenario

Our optimistic scenario is based on a 3% increase in revenue growth compared to our base case scenario as well as an upsurge in the content asset with a gradual growth rate from 3% to 1%. These rates represent a higher growth of Netflix's subscribers than our base estimates due to several factors like a more significant impact of the Starlink project on the penetration rate of the SVoD market and a larger market share for Netflix due to original content's success. Furthermore, in this scenario we assume that the general and administrative expenses will increase by more than 1% on average due to Netflix's large expansion, which comes with more challenges managing the company. This overall growth of the total number of paid memberships has led to a higher valuation represented by a target price of $784.3.

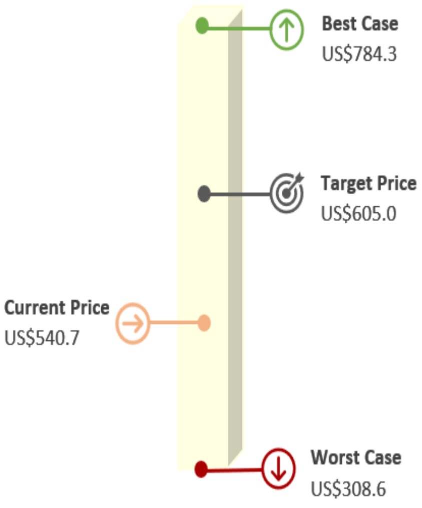

Figure 28: Netflix's Share Price Diagram.

Source: Forecast.

- ### Worst Case Scenario

Contrarily to our optimistic vision, in the worst-case scenario, we considered a revenue growth of 5% less than the base case, including a higher churn rate, and a decrease of content assets by 2% on average. In our view, the main reason negatively impacting the evolution of Netflix's subscribers is the intense competition present in the market. Although we predict a high growth in the market share of Disney+ in the next few years, there are still other strong players in this industry, like Amazon Prime and HBO, which can reduce Netflix's market share and its licensed content assets. Likewise, it is also possible that, during our forecasted period, new streaming video services will make their presence in the market. Moreover, indirect competition can have a more significant influence than expected in our forecast, and new forms of entertainment can slow down SVoD subscribers' growth. Following this logic, we added 1.5% in marketing costs to face this competition and attract more users, investing more in merchandising and advertisement. In conclusion, with slower subscription growth, less produced content, and more advertisement expenses, this pessimistic scenario has resulted in a lower valuation with a target price equal to $308.6.

Investment Risks

With the continually changing environment and the increasing uncertainties caused by the pandemic, our target share price is subject to change due to specific risks related to Netflix, which are as follows:

- Currently, one of the major threats that can affect Netflix comes from Disney. This company has a high cash reserves and an extensive catalogue of content assets worth billions. With TFCF's acquisition, Disney plans to expand this catalogue to a level never seen before in the entertainment industry. The decisions this company will make for its online platform could have a massive impact on Netflix, especially if the company decides to challenge Netflix to acquire licenses or extend Hulu's activities in which it currently holds a share of control[20].
- If Netflix's subscriber growth were to stagnate, the company could face very severe pressure from creditors. It would consequently be forced to decrease its expenses, whether in terms of production or licensing.
- Netflix's strategy of increasing debt has overlapped with a long period of low-interest-rate environment. Still, these conditions might change in the next few years as the economy starts to recover.
- Our assumptions indicate that Netflix will have a relatively large growth in the future, which can cause some difficulties for the company in managing produced content and sustaining a high-quality service.

Final Recommendation

Corresponding to the analysis presented above, we estimate Netflix's equity value to be 267.38 billion$ ($605 per share), representing a potential growth of 12% compared to the current share price of $540,73 (as of 31-Dec-20) - **BUY** recommendation. Our target price is based on our long-term view of the company and our vision regarding the SVoD market evolution worldwide.

[20]Source: Xnquebec 'Who said disruption would be easy'-February 2018.