Valuing high-growth companies

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EXECUTIVE SUMMARY

The purpose of this thesis is to identify the most difficult challenges when valuing high – growth companies. Secondly, based on theoretical research and historical real life experience to find solution for the main obstacles that analysts face with during computations of fair value of the high – growth enterprise. Thirdly, as an example – Netflix Inc. was chosen to be investigated.

Nowadays, especially in Internet Industry, a lot of companies show off unbelievable high financial results (Only 31,78% of all young start – up's survive 7 years). A lot of investors and business analysts do try to measure whether such firms are expected to maintain the growth, how long booming period will last and to determine the maximum potentiality of the enterprise. Deep analysis of phenomenon were conducted and the most important information was collected from the various reports (Deutsche Bank, Morgan Stanley, UBS Evidence Lab etc.), educational books and other reliable articles to detect the main differences between valuing standard and high – growth companies. The structured theoretical solution was identified and represented in this project.

Netflix Inc. – a company that has been featuring booming period recently, started expansion into new markets since the growth pace in Domestic Segment is slowing down. Innovative and modern products of Netflix are expected to conquer the foreign markets. In order to determine competitiveness of the company and its product, many strategical analysis were applied: SWOT, Porter's 5 Forces, VRIO. Furthermore, the profitability analysis were conducted too in order to determine the firm's effectiveness, risks, financial structure etc.

Based on the findings from the strategic and financial analysis, the high – growth companies' value is mainly depended on the estimates of the revenue (potential market size & growth rate), and the operational margin. Due to implemented Scenario Analysis, the price of stock of Netflix Inc. is estimated to vary from 67,18 USD to 202,23 USD.

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Part I

Introductory Remarks

2 INTRODUCTION AND MOTIVATION

2.1 BACKGROUND

According to fortune magazine 10 fastest growing companies in the world on average have generated 70% total return during the last 3 years. Such abnormal return would seem to be more than attractive; however, everything has its' cost. In case of return the cost are equal to risk. Risk and return relationship has been known for decades now (Damodaran, 2014); (Koller, Geodhart, & Wessels, 2015); (Petersen & Plenborg, 2012).

Valuation high-growth companies is a challenge, due to volatility and uncertainty about the future. Sometimes it is even described as hopeless. (Koller, Geodhart, & Wessels, 2015, s. 731). However, the potential of earning high returns is very attractive to a high risk profile investors. Therefore, the goal of the project is to find the most applicable valuation model and the most objective valuation techniques for valuing high growth companies in order to capture this potential. In this paper we assume that by making some adjustment to traditional valuation methodologies and giving a particular focus to specific stages in appraising such companies becomes possible to increase the objectivity and representativeness of valuation.

A firm in stable growth is different from the same firm in high growth on a number of dimensions. Generally, mature companies are less risky, use more debt, have lower excess returns and reinvest less than high-growth companies. (Damodaran, 2009, s. 146) The main differences between high growth companies and stable-growth companies:

- Equity risk. High-growth companies tend to be more exposed to market risk.
- Project returns. High growth companies in many cases have high returns on capital (and equity) and earn excess returns. It is much more difficult to sustain excess returns.
- Capital Structure. Usually high growth companies use less debt than stable growth companies as company's maturity leads to debt capacity increase.

In this paper high-growth is quantified as minimum 15% organic growth in revenue on average during the last 3 years. In comparison with 3-5% stable-growth.

Netflix Inc. has been chosen as suitable case company for testing the high-growth valuation framework for several reasons. Firstly, the company has on average generated 24% growth in return in past 3 years and 45 % growth in total return respectively. Secondly, the company's stock (NFLX-US) has appreciated by 170% in value during 3 years period. (Thomson One Banker, 2016). Thirdly, the company operates worldwide and has geographically diversified client base. Consequently, empirical part of the thesis will provide a future growth estimate and a fair value of the stock.

2.2 MOTIVATION AND RESEARCH QUESTION

- **What are the main challenges in valuing high-growth companies?**
  - o How valuation of high growth companies is different from valuation of stable-growth companies?
  - o What is fair value of Netflix Inc (NFLX-US?

2.3 STRUCTURE

Structure of the thesis is presented below:

Chapter		Content
Part I	Introductory Remarks	Scientific framework
Part II	Theoretical approach	Valuation theory
Part III	Empirical approach	Valuation of Netflix Inc.
Part IV	Concluding remarks	Discussion of findings & conclusion

Table 2-1 Thesis Structure

Part 1 introduces the reader to the basis of the thesis and provides methodological view.

Part 2 presents theoretical background on valuation mainly focusing on adjustments to be made to traditional technics in order to apply it for valuing high-growth companies.

Part 3 applies a developed valuation technics for a case company – Netflix Inc.

Part 4 presents the key findings of the thesis and answers the research question.

2.4 METHODOLOGY AND DELIMITATION

Research Onion by Saunders et al. as a tool was chosen to introduce methodology of the project. The frame of Research Onion will help to explain the research methods of the thesis and give reader an explanatory perspective of the conduction of an analysis and content.
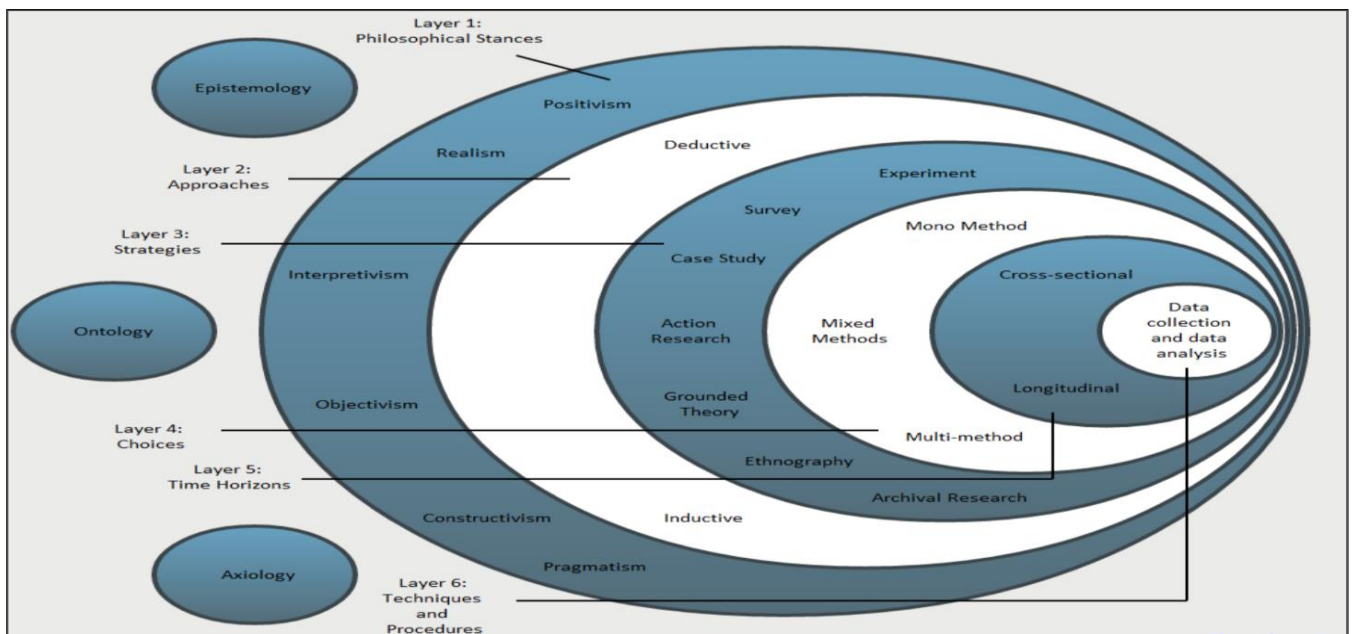
Figure 2-1 Research Onion (Saunders & Tosey, The Layers of Research Design, 2013)

The philosophy position of the project is **Epistemology**. S.Saunders excludes the positions of philosophy in his Research Onion theory even it gives a wider philosophical view to his exploration methods. Epistemology features positivism, critical realism and interpretivist. The science of Epistemology studies the nature of knowledge, rational beliefs and justifications. Furthermore, the branch of science Epistemology explains the correlation between knowledge, facts and truth and/or beliefs. The thesis of company Netflix Inc. valuation is based on facts and truths, which are the information gathered from published official Income Statements, Balance Sheets. In addition, the Market Capitalization of the company is a *de facto* value that is determined by markets and cannot be influenced by researches opinions, views etc. In the instance of the project, financial models and theories are applied in order to arbitrage the fair value of the firm. Therefore, theoretical valuation approach application on real life phenomenon means that the position of philosophy is Epistemology (Porter & Noah, 2014).

The primary philosophical theory of the report is **positivism** According to the theory, positivism generates objective hypothesis, which could be proven scientifically. The theory of positivism states

that phenomenon could be described and observed from equitable viewpoint (Saunders & Tosey, The Layers of Research Design). Whole project consists of tests, statistical analysis, financial models that are applied to detect the fair value of the firm. Researches are the third party of this phenomenon who apply valuation models (Discounted Cash Flow Model) on statistical information that is interpreted by project conductors. Thus, the secondary philosophical theory is **interpretivist**. This type of philosophical theory is used as a supportive method to explain the project. Interpretivist defines the linkage of different mental parties involved in the subject. In the case of this valuation project, fundamental analysis of an estimation of enterprise Netflix Inc. are applied as well as more objective ones. As calculation of the firm value and company value itself is influenced by investors' expectations, perception of the market, tolerance of risk, ratios of market tendencies etc., such mentioned factors are interpreted in a manner of determining unbiased and reasonable price of share.

Both **deductive** and **inductive** methods are used for research approaches, according to Research Onion (Saunders & Tosey, The Layers of Research Design, 2013). Deductive research approach features the following sequence of exploring phenomenon: *Theory – Hypothesis – Observations – Confirmation*. On other hand, inductive method expounds the analysis from another angle: *Observations – Patterns – Hypothesis – Theory*. Even though both methods let the report to be perceived from different perspectives, a mixture of both paradigms could be applied at the same time as it is in this thesis. The **deductive** method arises in the part of the project where theoretical pattern – Discounted Cash Flow model is implemented. Furthermore, fundamental analysis of Netflix Inc. business operations, that are based on specific academic models (PESTEL, VRIO, Porter's 5 Forces etc.) provide structured information that is used to get a final outcome – price per share. The **inductive** method of research approach is detected in the thesis as the current Market Capitalization of the company is known since the Netflix Inc. is a public traded company. Therefore, the market price of the firm is observed by exploring information provided in enterprise's Consolidated Balance Sheet and Income Statement. After these observations are done, all the outcomes are investigated according to the theories being used in this report.

The dominant strategy of the research is a **case study** method. As a supportive strategy which helps to analyze the report is **grounded theory** design. Therefore, the mixture combination of research strategy is being applied in the instance of this valuation report. Case study is defined as a factual investigation of a specific present phenomenon within its real life context. Meantime, grounded

theory design develops research in contextual, explanatory and process oriented way (Rowlands, 2005). The process of investigation, in this instance, is DCF model application on company Netflix Inc. profile (*a phenomenon*) when theoretical pattern is being implemented and interpreted in order to achieve pragmatic result.

The research choice is **multi-methods**. Both types of information: **quantitative** and **qualitative** are included and interpreted in this thesis. Data collected from annual reports (Financial Reports), data base of statistics is considered as an quantitative information that is treated in systematic, mathematical patterns (Saunders & Tosey, The Layers of Research Design, 2013). Moreover, a lot of calculations are conducted in order the investigation of the case would be proceeded in argumented, rational way. The fundamental analysis (PESTEL, Porter's 5 Forces, VRIO etc.) that lead to the determination of future influences, which could have significant impact on current price of stock, are the qualitative study.

The time horizon of the project is **cross-sectional** because valuation is made in a specific time. In addition, the final conclusion of the project is going to last terminated period of time as analysis are constructed on the latest official firm's published documents. Forecasts of the company's financial results are predicted for the next 5 years. The subject – firm Netflix Inc. is a single phenomenon of the analysis.

Primary and **secondary data** is composed and interpreted in the report. Primary data is considered to be the one that is gathered from the official data-base of the company, while secondary data is all other information (Business reviews, articles etc.) which is a complementary input to support analysis.

Limitations:

- Forecasts might change according to the new published information
- Accounting Policies were not taken into consideration, thus it could have misalignment
- Authors of the project were not able to receive all the information that representatives Netflix Inc. might have
- The lack of evidential information about valuing young high-growth companies
- Assumptions are biased due to current market conditions. Changing macro - economical situation in different countries, the Forecasts would change accordingly

Part II

Descriptive analysis

Valuation approaches. Applicability of traditional valuation models for valuing high growth companies

3   DESCRIPTIVE ANALYSIS

The following part of thesis aims to describe and analyze traditional equity valuation models and technics. In line with the research question of the thesis, only the aspects and elements, required particular attention in valuing high growth companies, are presented and discussed more thoroughly. Consequently, it is assumed that some processes such as reformulation of financial statements are assumed to be applicable to both: high and stable growth companies. The expected outcome of this paper section is to highlight specific elements and processes, which are predominantly relevant in valuing high-growth companies for increasing objectivity and reducing uncertainty risk.

3.1   VALUATION APPROACHES AND TECHNICS
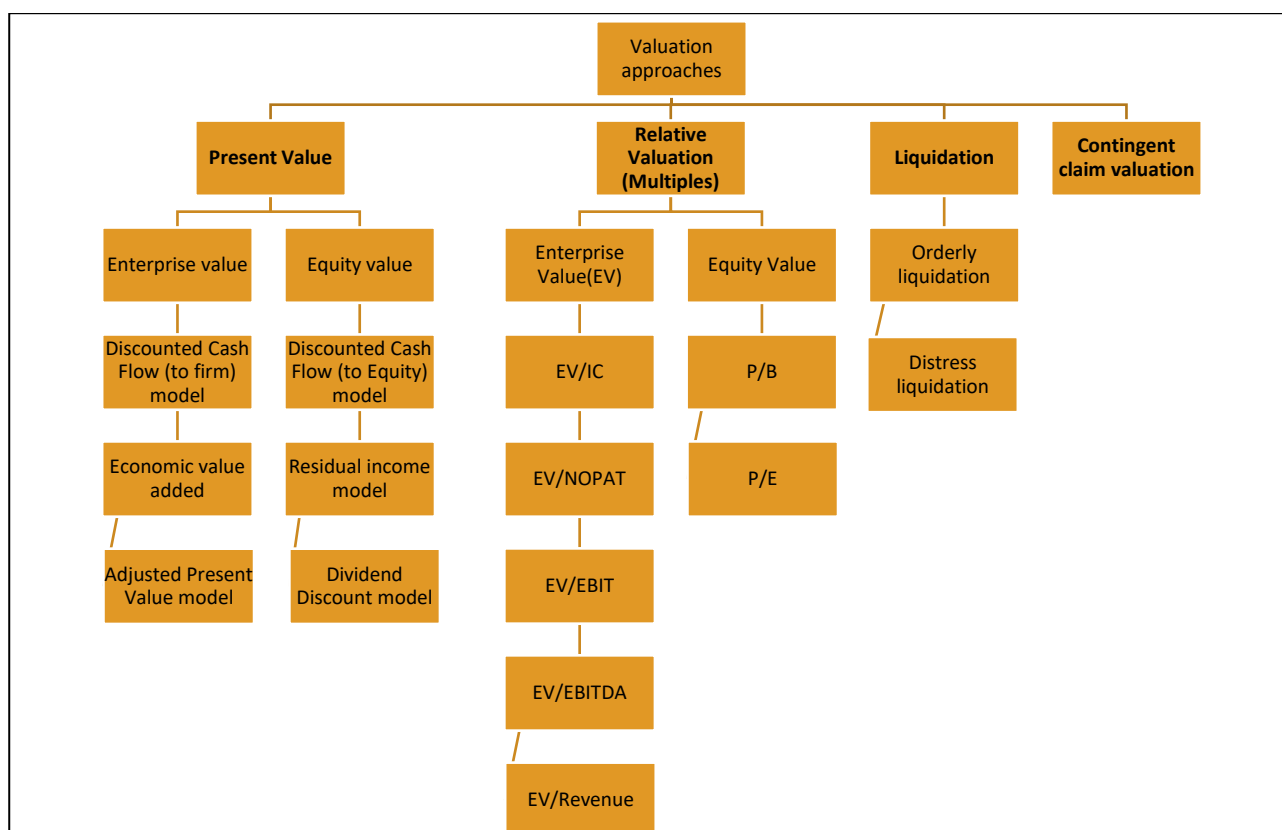
Figure 3-1 Map of different valuation approaches. Copyright Christion Petersen Thomas Plenborg

The figure presented above represents different valuation models. According to Christian Petersen and Thomas Plenborg despite the variety of valuation models discounted cash flow (DCF) model is the most popular valuation method among practitioners. (Petersen & Plenborg, 2012, s. 211). Such trend can also be clearly seen when looking to valuation reports of different practitioners such as

Sydbank, where DCF model is extensively used in almost 100% of valuation cases. (Sydbank, 2016). Application of relative valuation and liquidation for valuing high growth companies is hardly possible in most of the cases as frequently such companies have no direct peers or no clearly defined industry (mostly "blue ocean" companies) as well as companies with relatively little liquidation value. Contingent claims model fulfills and eliminates a lot of drawbacks of DCF model. For this reason this model will be discussed further in this paper.

3.2 DCF – DISCOUNTED CASH FLOWS MODEL

The general formula of DCF model is provided bellow for better understanding of the approach.

$$EV_0 = \sum_{t=1}^{\infty} \frac{FCFF_t}{(1+WACC)^t} + \frac{FCFF_{n+1}}{(WACC-g)} \times \frac{1}{(1+WACC)^n}$$

EV=Enterprise Value (both lenders and equity holders)
FCFF=Free cash flow to the firm (both lenders and equity holders)
WACC=Weighted average cost of capital (both lenders and equity holders)
g=Constant growth in FCFF in the terminal period
n=Number of year with (high/low) growth in the forecast period

Mathematically value of the enterprise is a sum of present value (PV) of yearly known (forecasted) free cash flow to firm (FCFF) and PV of terminal period value. The crucial impact on the worth of the company has terminal value which amounts substantial portion of the sum. Terminal value is a period of perpetuity after forecasted length of time when firm becomes mature and its growth become unpredictable or/and constant. Additionally, every different expected cash flow to company is discounted in regards to enterprise's corporate structure and costs of capital to calculate the present value (PV) of the future incomes. (R.H.Parker page 66).

In spite of the popularity of the DCF model, academic literature widely highlights drawbacks of this model. Firstly, DCF fails to capture the value of managerial flexibilities and strategic decisions such as the option to expand, delay, abandon, or switch investments. Secondly, for a firm with large component of growth opportunities, the potential cash flow (or the value of the underlying asset) is very volatile. The volatility of the cash flows premiums, which must be added to the risk-free rate to determine the appropriate discount rate. Third, because of the characteristics of the growth options, cash flows exhibit non-linear behavior. Thus, usual exercise in DCF of computing expected cash flows becomes a problem and, at its worst, meaningless. Fourth, DCF is unable to make time-series

links across projects and the impact of a project on future investment opportunities is not accounted for. Finally, DCF analysis is linear and static in nature and assumes growth opportunities either are not totally reversible or are now-or-never opportunities. (Ottoo, 2000, s. 21)

The main challenges in applying DCF model in reality underlies in subjectivity of forecasted performance indicators, particularly in terminal period. (Damodaran, 2006, s. 15) This is particularly applicable to young and high growth companies where terminal value frequently accounts to 90% or even more than 100% of the current value of company. (Damodaran, Valuing Young, Start-up and Growth Companies: Estimation Issues, 2009). Consequently, terminal value will be analyzed more thoroughly in subsequent chapters.

To sum up, DCF model is the most appropriate valuation method for appraising high growth companies. However, particular attention should be drawn to calculation of terminal period value as well as to assumptions underlying WACC.

3.2.1   Estimating costs of capital - WACC

In this section of the paper weighted average cost of capital is going to be analyzed trying to draw attention to the most important elements of it in valuing high growth companies. As mentioned before high growth companies have major differences in comparison with stable growth, mature companies. Please refer to introductionary part of this paper. The subsequent paragraphs will extensively focus on containing elements of WACC, such as capital structure and required rate of return.

As general formula of DCF shows WACC is one the key elements in enterprise value calculation.

As well as terminal value WACC is a subject to forecasting precision and practitioner's subjective judgement. Particularly high attention will be assigned to adoption of different techniques in WACC calculation of high growth companies in further sections of the paper.

$$WACC = \frac{NIBD}{(NIBD + E)} * r_d * (1 - t) + \frac{E}{(NIBD + E)} * r_e$$

3.2.2 Capital asset pricing model –CAPM

Estimation of owner's required rate of return: to estimate the owner's required rate of return CAPM is used (Petersen P. , 2012). The CAPM defines a stock's risk as its sensitivity to the market as a whole (Koller, Geodhart, & Wessels, 2015, s. 293). Other methods for measuring costs of capital such as Fama-French are assumed to be not the best option in case of high-growth companies due its' properties.

$$r_e = r_f + \beta_e * (r_m - r_f)$$

The equation suggests that investors must be compensated by at least the risk-free interest rate. Then the un-diversifiable risk of holding that specific security, β_e, multiplied by a risk premium, $(r_m - r_f)$, the difference between market returns and returns from risk-free investments, must be added.

A risk free rate is defined as one where the investor knows the expected return with certainty. (Damodaran, 2006, s. 35). Consequently, two conditions should be met. Firstly, no default risk, which generally implies that the security has to be issued by government. Secondly, there can be no uncertainty about the investment rates. (Damodaran, 2006, s. 35). The most common security for determining risk free rate is 10-year zero government bonds. However, different countries has different rates on such securities. Bloomberg.com currently the rates are as following: US – 2,45%, Germany 0,29%, Hong Kong 1,65%. Looking to this data the natural question arises; which risk free rate should be used in valuation? (Koller, Geodhart, & Wessels, 2015, s. 289) advocates that government bond yields denominated in the same currency as the company's cash flow. Moreover, authors suggest to add expected inflation rate in order to overcome the inconsistency between interest rates on government bonds and market values of equity. (Koller, Geodhart, & Wessels, 2015, s. 289).

Academic literature argues that the risk premium should be based at least partly on historic data (Brealey, 2013) because the assumption is that there is a normal, stable risk premium on the market portfolio. Damodaran suggests a risk premium of 5% (Damodaran, Credit default spreads and risk premiums, 2014), Petersen & Plenborg proposes a risk premium for Europe of 5.3% while Koller, Goedhart &Wessels advocates for 7% in the USA and 6% in Europe. (Koller, Geodhart, & Wessels, 2015, s. 291). In spite the fact that this element remains constant regardless a growth rate of a company, we argue that the market risk premium as high as 7% should be used in valuing high-growth companies. It better represent market volatility and would contra-bias the optimism of the growth potential.

Beta represents a stock's incremental risk to diversified investor, where risk is defined as the extent to which the stock moves up and down in conjunction with the aggregate stock market. (Koller, Geodhart, & Wessels, 2015, s. 293). There are to traditional approaches in calculating beta value; first using historical data to compute beta and second use industry peer median. As mentioned before, when valuing high-growth companies the core focus are is future. Moreover, frequently high growth companies have a historical performance which can be hardly expected in the long run. Consequently, using industry peers median methodology is assumed to be more representative history based approach.

High-growth companies as a rule are the ones presenting to a market something new, something that has never been seen before. Ford, Apple, Microsoft, Google etc. are the companies which introduced to customers unique, new and original products. Back then there were no peers for those companies or even defined industry. Therefore, when valuing high growth companies it is extremely important to understand the business model, future vison and mission of company under valuation. Finding parallels in company's philosophy might help to identify peers or at least the companies, which would give insight to the future prospects of the other firms. Such approach could be used in setting beta value as well. However, it is naïve to expect that some company will repeat the performance of the other. On the other hand, using this method is more objective then basing beta value extensively on company's historical performance. Consequently, it can be argued that using industry beta median is the best option to use in valuation of the high-growth firms.

3.3 FORECASTING

Forecasting in finance is sometimes more art than methodical prediction as it consists of a lot of distinctive factors that have significant influence on the business operations. Forecasting the future of the high-growth firms is meant to be even more complicated due to the lack of historical information about the market trends, company's structure and adaptation to the market changes. In addition, firms that feature high rates of growth typically operate in the new industries where determination of current and potential competitors is complex. Thirdly, the capital structure of young and growing companies is dynamic (Damodaran, The Little Book of Valuation: How to Value a Company, Pick a Stock and Profit (Little Books. Big Profits), 2011). Furthermore, opposite than forecasting for standard stable enterprises, prediction of financial results are based on future perspective more than on the past results.

However, based on Harward Business Review (C.Chambers, Mullick, & Smith, 1971), there are some techniques that could be applied in order to systemize the business forecasting for high growth companies. Out of 18 different prediction models from 3 different groups (Qualitative Method, Time Series Analysis & Projection, Casual Methods) are chosen to be suitable for making financials forecasts for young and rapid growth firms. Group of Time Series Analysis & Projection methods were not compatible as all of the techniques are set on historical data which is the instance for the young companies having only several past years financial income statements. Applicable methods of conducting financial forecasting are presented below:

3.3.1 Qualitative Method

Market Research

Forecasting method that is based on market analysis. Proper implementation of dozens market analysis could lead to the precise market projections of the firm's future perspectives. There are several paths how market researches could be conducted. One of them is to contact customers, experts of specific business field directly in order to collect relevant information which would help to draw the future trends of the market. Another way is to use secondary data (statistics of the industry i.e.) that would help to analyze particular industry. Both ways are acceptable, however the second option is economically cheaper and easier to implement.

Depending on the type of industry where company operates most compatible framework of the market research must be chosen. Mixture of analysis is recommended in order to perceive a wider angle of the expected market trends. Most widely these theoretical templates of analysis are conducted: SWOT, PESTEL, Porter's 5 Forces, VRIO, Strategic analysis, Market Segmentation analysis and others, in order to determine future market trends, eventual supply & demand etc.

Historical Analogy / Relative Comparison

Even though young high-growth companies do not have long prehistory, similar foreign companies or analogical projects abroad usually exists. Due to this reason, according to the article: Measuring and Managing the Value of Companies (Goedhart, Koller, & Wessels, 2015) in order to make financial forecasting for young enterprises more objective, similar examples of the high-growth companies should be found. If there are any relative comparisons in foreign market, analysis of historical analogy helps analysts to foresee the possible managerial mistakes or advantages, financial threats, market trends and so forth that, could appear in the future for an enterprise that is being valuated.

Being more precise, the profitability, liquidity and other ratios that have impact on firm's value must be compared with similar company or same enterprise's division. However, differences in accounting, other business operational impacts must be taken into consideration in order to avoid misleading assumptions to be made. Therefore, value creating financial drivers (multiples) of the compared firms or divisions should be measured. Furthermore, earnings of the enterprises must be normalized. In other words, all expenses that are not relevant to the core business operations (pocket money for the spouse of CEO etc.) must be excluded from calculations. Moreover, to avert from miscalculations and an effect from seasonality and to exclude other results unbalancing effects the best is to compute year averages of multiples. (Petersen & Plenborg, 2012, s. 233)

Despite the financial ratios, non-financial components of the company must be observed and analyzed too. Marketing campaign and market segmentation (target group of customers) must be compared in order to foresee whether firm that is being evaluated is targeting the potential clients of its' product or not. For instance, if there was a start-up – provider of *Tasks Planning* services (an example, App for the mobile phone) for B2B customers and it failed. Therefore, assumption could be made that similar type of service firm might not succeed too and vice versa.

The same as marketing strategy, other managerial programs are important as well. Every different type of a company must be analyzed individually and distinctive analytical frameworks must be applied to compare business organizations in order to forecast the possible cash flows of the particular firm.

However, the relative valuation model for valuing high growth companies could be only supportive method as this model does not provide the whole picture of the potentiality of the rapid growth start – up. Other relevant aspects that must be taken in consideration are: different investment strategy, differences in accounting policy, lack of information sources, negative earnings that might have significant importance on multiples (Petersen & Plenborg, 2012, s. 234)

Analysts valuing young business organization must be aware of negative earnings of the start –up. Unequivocally, this multiple is directly depended on the strategy of investing, meaning that some young start – up do expense investments (brand building expenses, loyal customers programs etc.) in Income Statement meanwhile others do not. Furthermore, the comparison method sometimes difficult to implement since most of the small companies have not published their financial information (Goedhart, Koller, & Wessels, 2015).

3.3.2 Visionary Forecast

That's a prophetical vision of the possible future market swings, trends. This method of forecasting consists of subjective, non-theoretical insights, facts of the particular situations that are taken into account by specific field experienced experts. Systematic approach of visionary forecasting is difficult to structure as it is simply a logical and rational interpretation of current data that could reveal future prospects of the particular business.

As an example of short-term forecasting is: there is some rumors in the market that Google intends to invest in phone telecommunications to provide free calls opportunity for Google users. Due to this reason, if there is another young start-up which is planning to do the investment in the same project, it's easy to come up with a conclusion that most probably young start-up is going to fail just because of the size, knowledge and financial resources of Google.

As a good example of long-term prediction would be a digitalization of the companies. It's quite obvious that enterprises which invest a lot in hi-tech field will probably be more successful and more efficient than the ones which still uses old-fashion technologies.

Such considerations and comparisons provide us an ability to forecast the potential market trends. This method belongs to the group of Qualitative Methods because these judgments of possible scenarios must be still based on statistical information in order to make forecasts valid.

3.3.3 Causal Methods

Leading Indicator

Leading indicator method is another forecasting model that is easy and extensive to use for forecasting future of the high – growth young company.

This approach of forecasting is mainly used to predict Income Statement and Balance Sheet items, which expected to change depending on one or several leading indicator. Leading indicators are typically indexes, which provide the core results of business operations, such as Revenue, no. of customers' accounts and so forth. For instance, the level of Revenue might a leading indicator that signals the volume of expenses. In addition, the combination of several leading indicators may also exist. For example, level of NOPAT (Net Operating Profit After Taxes) and ROIC (Return On Invested Capital) ratio would lead to the information how much of capital company needs to obtain by maintaining specific ROIC level etc.

Therefore, by finding the change of the leading indicators in the future, it's possible to predict the whole business results upcoming years.

Secondly, leading indicator also could be an index of the, for instance, GDP level of the nation where business is being operated and etc. Most of the business are interconnected, thus knowing the linkage between different indications provides us ability to foresee possible future (C.Chambers, Mullick, & Smith, 1971).

According to (Petersen & Plenborg, 2012, s. 175) the main driver that must be foreseen is strategic value driver which would lead to presumption of further development of the company.

Figure 3-2 Value drivers. Source (Petersen & Plenborg, 2012, s. 175)

The main difference forecasting enterprise's evolution upcoming years between young start – up and matured firm is that determination should be not based on the past results, but on growing company's strategic goals and managerial & financial capabilities.

- **Economic Input / Output Model**

This forecasting model is a combination of all previous mentioned predictions methods. Input – output model emphasizes on supply/demand theory, meaning that if the demand will rise of particular product that company is serving, sales obviously will follow the trend too. Secondly, competition of an industry where enterprise operates should be discussed also in this forecasting method. The same as other companies that produce similar products/services must be identified, also global market has to be analyzed to inspect possible substitutes of the product/service. Moreover, the size of the market that start – up is targeting must be detected in order foresee the potentiality of the company and forecast the possible growth of the firm. This forecasting model focuses more on long-term changes that could affect the young high – growth enterprise (C.Chambers, Mullick, & Smith, 1971).

3.3.4 Two stages of the forecasting

Every company belongs to the stage of business life cycle. In the part of forecasting, it's essential to determine which growth stage enterprise is surviving since the length of growth and the volume of business growth are directly depended on the business life cycle. According to Harvard Business Review "The Five Stages of Small Business Growth" (Churchill & Lewis, 1983), 5 stages of business cycle are identified: Existence, Survival, Success, take – off, Resource Maturity.
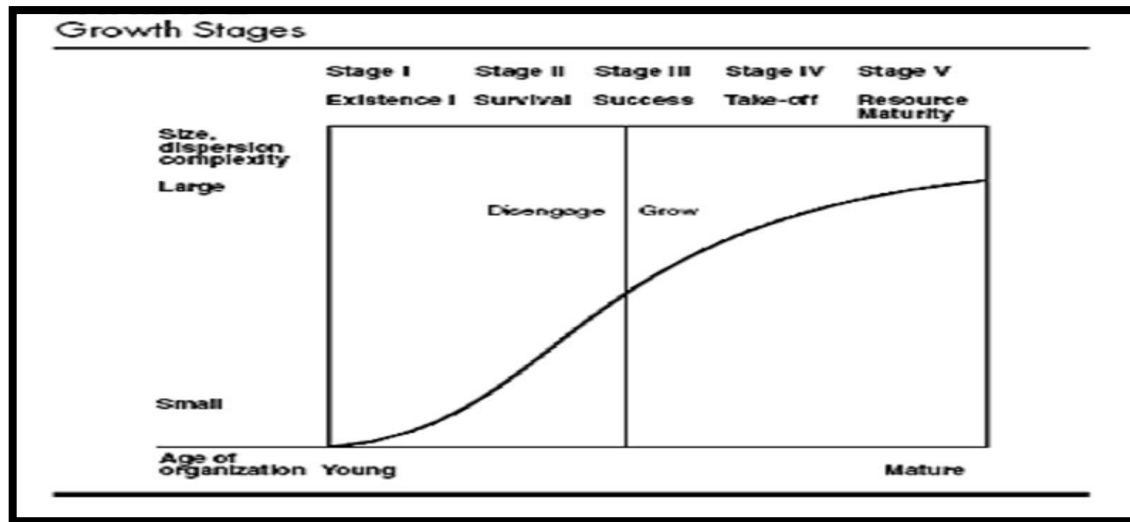
Figure 3-3 Growth Stages (Churchill & Lewis, 1983)

In DCF valuation approach 2 phases of growth are classified: Growth & Terminal phases. Young high – growth firms, having above 10% of business improvement every year, are normally in the growth stage. Depending on the type of industry, the growth stage lasts from couple of year or sometimes even up to 15 years until it reaches Terminal period – a time when the growth becomes stable and less than 10% a year. (Damodaran, 2009)

Therefore, forecasting the future becomes very complicated and important task in valuation of a company. In addition, in an application of the DCF valuation approach forecasting plays significant role on enterprise's value.

Growth Stage

In forecasting the Present Value of the company in growth stage is app. 20% value of all enterprise's value. Nevertheless, it has important role on the core valuation approach of young company because during period of growth start – up would target a market that aims to conquer. Therefore, in the event of success company would achieve its targets in the market, and it could expect a stable growth in the

Terminal period. For instance, firm is conducting an expansion to the new foreign market. In case of the triumph, company would show significant business booming during the period of an entering to the new market, but also a firm might have the greater growth rates in the terminal period.

Proportion of firms that were started in 1998 that survived through							
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Average All Firms	81.24%	65.77%	54.29%	44.36%	38.29%	34.44%	31.18%

Table 2 Proportion of firms that were started in 1998 that survived through (Damodaran, Valuing Young, Start-up and Growth Companies: Estimation Issues and Valuation Challenges, 2009)

Unfortunately, as it's possible to see from the graph above, young companies succeed quite rarely. These percentages of survivals are averages. The higher risk companies do fails even more often (Survival rate – 24,7%).

Furthermore, the forecasts of the enterprise's development must be **Started From The Future** – not as it's used to be when standard company value is being assessed. Moreover, projections could be made through a fundamental analysis of perceived future opportunities for the product, the firm, its divisions, or its industry (Ruback, 2010).

Forecasting for the shorter - time of period, the most crucial aspects in company valuation are, according to (Firth, The Role of Forecasting in Business , 1975):

1. **Corporate planning**

   The strategic planning of the company for the next several years is one of the most firm value influential criteria. Short – term goals (profitability and returns ambitions), expansion plans, potential risks and threats are key elements that must be considered in order third party could assess company's capabilities. Secondly, the governmental, social and economic changes must be identified and impact of them must be precisely named.

   Valuing high – growth firms without long history requires different methodology to conduct than forecasting the future of standard constant growth company. Deep, sophisticated and very precise analysis must be done to foresee how much firm is able to grow by improving its corporate strategy. In other words, every corporate change of the company must be measured in percentages to predict how much corporate improvement would affect the Cash Flow of the firm (Goedhart, Koller, & Wessels, 2015).

2. **Marketing strategy**

High – growth company is expected to have a successful marketing campaign. However, if company aims to enter to new market or establish new product line, firm must know and assure that the newly implemented strategic decisions will work out under different economic conditions: in the new market or to be popular among different type of customers.

The same as corporate planning, the forecasts of marketing strategy must be based NOT on the past, but on future prospects. The changes of marketing strategy and its impact on business results must be determined as much actual and explicit as possible.

3. **Production / Services**

If new improvements in value chain are going to be installed, an effect of it to the business process must be detected. Moreover, if there are any restrictions that could limit the amount of produced goods or served services, they must clearly identified since it could be an obstacle that could reduce the growth of the company. Threats and/or opportunities could be found also in regards to the other business history (Relative Comparison approach).

4. **Technological forecasting**

High – growth companies are meant to serve innovative and unique products that usually are high – tech solutions. Therefore, wide spectrum of competitors, which could copy the technology, can appear. Due to this reason, the possible influence to business must be taken into calculations too. Furthermore, the level of investments in Research & Development (R&D) within next several years should be followed in order to keep the high growth rate and maintain competitive advantages against competitors (Firth, Managerial Finance, Vol. 1 Iss 2 "The Role of Forecasting in Business" , 106).

5. **Finance**

Capital structure of high growth firms is usually more based on Equity. Nonetheless, joint ventures or business angels may arise. Consequently, the costs of capital could change. Secondly, the dividend policy could be switched according to he new equity holders requirements.

Therefore, WACC rate and Debt rate might be affected. These ratios and financial strategy have significant influence on the value of the enterprise.

Furthermore, the instance of Initial Public Offering (IPO) of shares of the firm has to be weighed.

The forecasting of the financial situation of the firm, including necessary ratios: BETA, WACC etc. is described and elaborated on them in another part of the project.

6. Management

The policy of hiring personnel, the labor requirements, and geographical position etc. of the growing company is important and could have significant influence on the company value in short – term too. In addition, the salary & compensation policy might be playing important role as young and high – grow enterprises tend to reward employees by stocks of the company.

3.3.5 Terminal Period

Terminal period in DCF model has significant impact on the value of the company, because it sums up app. 80% of the total firm value. Therefore, forecasting the growth rate for the terminal period has crucial significance. (Damodaran, 2009) The key questions to be answered are discussed below.

1. *Will the firm make it to stable growth?*

   As it's mentioned before, not all of the companies succeed during the growth stage. Only 31,2% of companies survive 7 years from the their start of the business. Therefore, the chances that company would reach Terminal value are low. However, once it becomes stable and constant growth company, the risk of bankruptcy reduces. Estimating the chances of survival for an enterprise in the beginning of the business life cycle is thus a vital component of the value, however that is not simple input to estimate.

2. *When will the firm become a stable growth firm?*

   Another hard and important task is to decide when firm becomes matured company. Enterprise becomes matured when its growth is stabilized, the process of value chain becomes balanced

etc. Companies tend to increase the debt ratio as it becomes to cheaper to borrow money from banks. Secondly, some of the enterprises decide to do IPO in order to attract more equity to the firm. Characteristics (Damodaran, Valuing Young, Start-up and Growth Companies: Estimation Issues and Valuation Challenges, 2009) (Damodaran, Characteristics of Mature Companies) of the stable growth company are:

- Reinvestment ratio drops

Since firm does not see the other possibilities to invest in high return assets, it starts saving cash or sometimes changes the dividend policy - it's one the of signs company has reached it's matured status of growth.

- Revenue growth is approaching growth rate in economy

This is a sign that company is not beating the market anymore and its organic growth has been equalized with an industry. Thus it's expected that company will not improve it's results significantly unless firm will change industry or invent innovative new line of products (e.g. Apple, GoPro).

- Margins are established

After growth period enterprises tend to optimize and standardize operations of business, which lead to the stable and balanced profitability multiples. Secondly, margins are similar to firm's direct competitors profitability rates.

- Cash build up

Once resources of cash increase, that might be one more important signal that company has reached it's matured life cycle. If firm has a lot of cash, this could lead to the assumption that firm do not know where to invest money in.

- Conquers a market

Enterprise having significant proportion of the market compared to its rivals might not develop in a sense of revenue growth anymore. Only global strategic changes (new markets, new industry etc.) would push growth of firm up.

- Changes in capital structure

Increased rate of debt is one of the signs that company has ability to borrow cash for lower rates. Lower rates of loans appear once banks perceive firm as a low risk organization (Damodaran, Valuing Young, Start-up and Growth Companies: Estimation Issues and Valuation Challenges, 2009).

3. ***What will the firm look like in stable growth?***
    Most of the forecasts are biased towards higher growth rates according to R.S. Ruback (Ruback, 2010). Research claims that analysts from the inside of firm are keen on giving optimistic forecasts for the firm. Therefore, all the information that is provided by the company and its representative must be critically valued.

    In practice, since it's very hard to predict company's projections in long – term, therefore these considerations are usually taken into account (Rotkowski & Clough, 2013):
    o   Historical long – term growth of similar companies
    o   Historical inflation rate
    o   Near – term projected growth
    o   Organic and inorganic growth strategies

Furthermore, according to *Investment Valuation, Tools and Techniques for Determining the Value of Any Asset* by Aswath Damodaran (Damodaran, 2002, s. 300), a company's long-term growth rate should be "determined by a number of subjective factors—the quality of management, the strength of a firm's marketing, its capacity to form partnerships with other firms, and the management's strategic vision, among many others." Therefore, all possible factors that could have impact on firm's value must be determined, considered and assessed.

3.3.6   Transition period in Terminal Period

According to (Damodaran, Security Analysis for Investment and Corporate Finance, 2006, s. 153) the third stage of business life cycle is detected – a transition period. High growth companies after intensive expansion does NOT become stable grow companies instantly. Between growth and stable development periods, there is a transition moment when firm slows down the speed of prosperity.

Interesting and common case is that firms after intensive growth period feature **negative** growth even economic condition is still improving. This happing appears when company slows down its development to the standard level of a particular industry where organization operates.

3.4   SUMMARY OF THEORY

A performed literature research proves that the valuation process of the high-growth companies is slightly different from the stable-growth companies. The identification of the critical theoretical aspects allows to create an adjusted valuation methodology. The following method is going to be applied to the case company in the subsequent part in order to empirically prove its applicability.

Forecasting is the key element of the valuation process and in case of high-growth companies the estimates should be future perspective based rather than historical based. The method suggests to start the forecasting from the future and work backwards to determine the speed of transition from high-growth to stable-growth. In order to foresee the future estimates, understanding of business model is critical. The identification of the key value drivers helps a lot in drawing a long future horizon.

Talking about the discount rate, the method suggest to use industry based estimates as it better represents the overall industry. However, the historical development in the market might also give an insight for the estimates since to foresee the future development of such items as capital structure are relatively difficult to assess objectively.

Discounted cash flow model seems to be the best option for valuing high-growth companies. In spite of the weaknesses the model overweighs the alternatives as the other models require a lot of resources and brings the same level of uncertainty

Lastly, the scenario analysis would provide a better understanding of the influence of the key value drivers for the enterprise value. Developing at least two different scenarios based on the changes in key assumptions would provide a brighter picture of the investment risk and may have a significant impact on the investment decision.

Part III

Empirical analysis

Valuation of the high-growth company. A case study of Netflix Inc.

4 EMPIRICAL ANALYSIS

In the part of Empirical Analysis, different Strategic Models are applied in order to gather information, which is relevant in Forecasting. In addition, company and its industry is described to understand company's business concept better.

Only the most relevant aspects of the company is taken into account. Additionally, other financial institutions (MorningStar, MorganStanley etc.) assessments (based on their analysis) are represented and it's used as a supportive material to the main project investigation.

Furthermore, calculations of operational effectiveness and profitability of Netflix are added to this section of this thesis in order to use data later on in the part of the forecasting

4.1 NETFLIX INC.

4.1.1 Company Review

Netflix Inc. is the world's leading Internet television network having over 75 million customers in more than 190 countries. (Netflix Inc., 2015, p. 1) There are over 125 million hours of movies and TV series streamed per day worldwide what can be done on many devices having a screen and an internet connection. Video content is streamed without commercials with viewers being able to stop, pause and resume the movies and TV shows anytime. The company is focused on broadening the streaming content and expanding services globally while also trying to make the streaming accessible on basically any electronic device having a screen. Netflix was founded in 1997 by its current CEO Reed Hastings and it is a U.S. firm.

Netflix Inc. had the IPO on the 29th of May, 2002 with a sale of 5.5 million shares of common stock at a price of $15. The share price movements starting from 2011 can be found in the chart provided below.
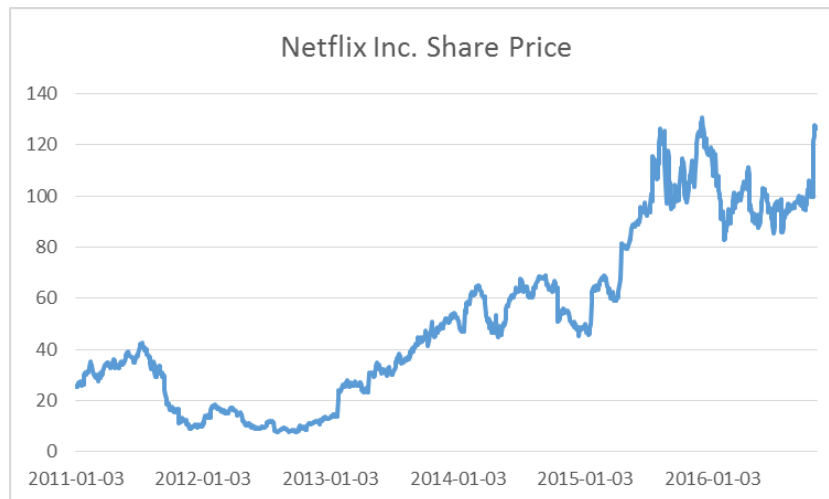
Figure 4-1 Historical Netflix Inc. stock price development. Source: finance.yahoo.com

There were two stock splits made since the IPO them being a split of 2/1 in February of 2004 and in a split of 7/1 in July 15, 2015. The share price of Netflix Inc. experienced significant drop in price particularly due to two reasons. The first reason was that implementation of new pricing model. DVDs-by-mail & streaming video plans were priced separately. More than 800,000 subscribers canceled their subscriptions as a result of that. Another reason was that the expansion to new international markets required higher expenditures that initially planned what led to various issues. (Forbes, 2016) As it can be seen from the share price chart above, the strategy paid-off and the share price started climbing up immediately starting from the beginning of 2013. As of the chosen date of the analysis the price of one Netflix Inc. share was equal to $126.57.

4.1.2 Business Overview

There are three reportable segments which Netflix Inc. has:

- Domestic streaming
- International streaming
- Domestic DVD

The domestic streaming is the largest segment which generates revenue from monthly subscription fees in the U.S. The international streaming segment generates revenue from monthly subscription fees as well from customers in countries different from the U.S. The revenue coming from the domestic DVD segment is based on monthly membership fees regarding DVD-by-mail services.

There are various subscription plans available in the domestic market out of which the "two screen high definition plan" is the most popular one regarding new memberships. Domestic streaming plan prices vary between $8 and $12. Domestic streaming segment was the only one which generates profits for the company therefore it is currently the most important one. However the analysis provided later on in this thesis will show that this segment is already mature and a further expansion rate is expected to be lower than in the international streaming segment.

4.1.3 Organizational Structure

There are over 3,700 people employed at Netflix Inc. in different countries around the world. Headquarters are based in Los Gatos, California. Functional organization structure, which is split according to the functions of departments, is implemented in Netflix. Moreover, the organization is centralized and the CEO R. Hastings has direct connection with managers of every division.
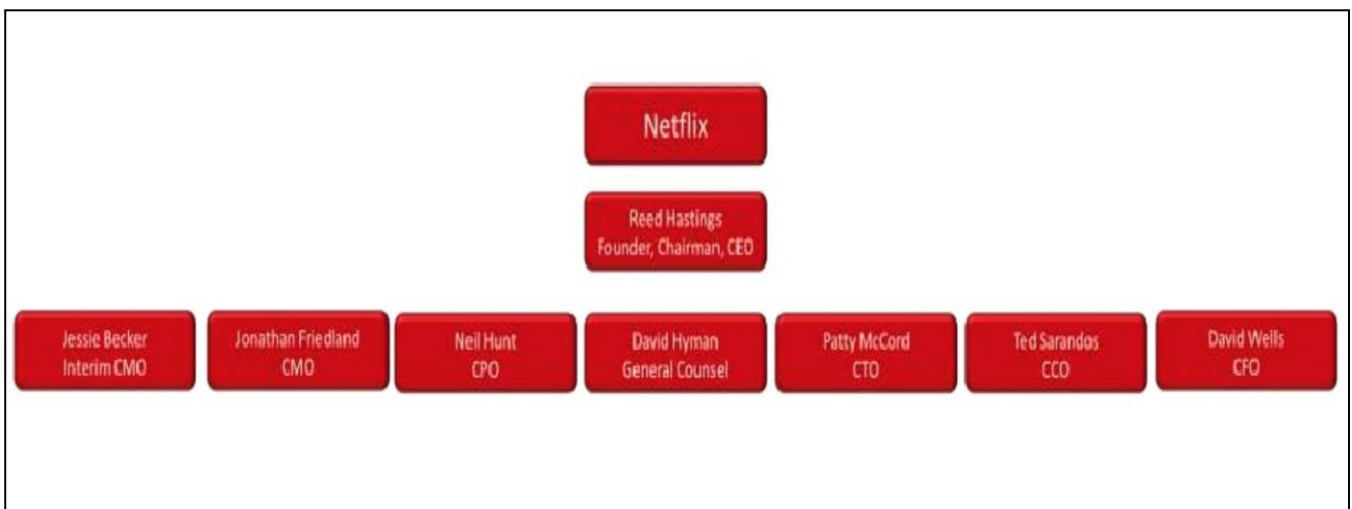
Figure 4-2 Organizational Structure of Netflix Inc. Source: netflix.com

R. Hastings is a protagonist of free, independent and deadline based management control system. Employees are measured not by how many time they spend at their work, but on their results. In addition, employees in most cases have a right to decide by themselves in order to increase the productivity, creativity.

Regarding the values of the organization, Netflix's credo is: "to act and perform their duties ethically and honestly and with the utmost integrity". Maintaining this philosophy firm is emphasizing on

creating cozy, interconnected, friendly working atmosphere. However, workers, who do not meet their deadlines or inefficient, are freely let go. (Netflix Inc., 2015)

4.1.4 Business Concept and Strategy

"Our core strategy is to grow our streaming membership business globally within the parameters of our consolidated net income and operating segment contribution profit (loss) targets." – Netflix, Inc. (Netflix Inc., 2015)

Netflix Inc., is a provider of the TV streaming and company has segmented its market in 3 sections: TV streaming in domestic market, TV streaming internationally, DVD rental in domestic market. Even services are more or less the same around the world, margins of sales and business model differ in different segments. However, the main value chain remains the same:
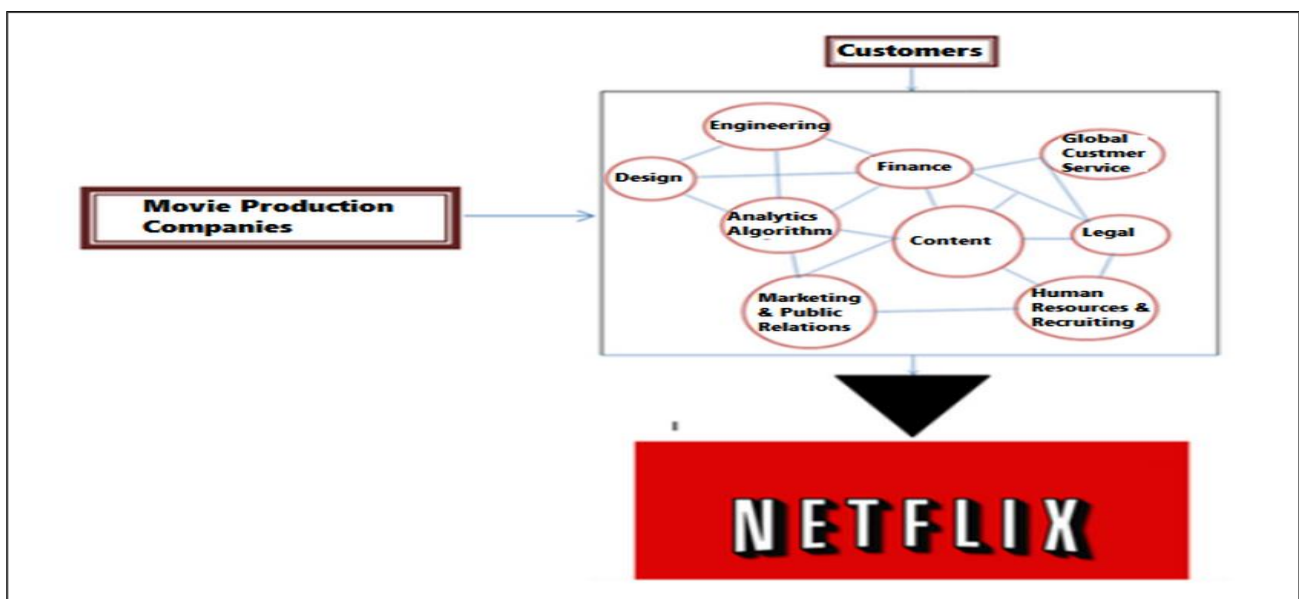
Figure 4-3 Netflix Inc. Value chain. Source: (Adithya.co, 2016)

Regarding a business strategy, Netflix tries to be in a leading position providing high quality services and being first online TV streaming channel of TV shows and movies in the market in different nations. Main strategic targets are briefly represented below: (Netflix Inc., 2015)

Customers:

1. Creating as much of TV content as possible

2. Increasing the quality of a TV streaming to better strengthen relationship with current customers and to attract new customers

Operations:

1. To track every customer interaction and behavior (viewing habits and preferences), by implementing new service delivery method

Development:

1. To invest in original and acquired content, providing a deep and varied library for subscribers in order to charge customers more later on

2. Netflix spent 9,6% of sales in Research & Development in 2015, which is 1% higher than in 2014. Company is expecting to continue its level of investments in R&D in the future

Markets:

1. In long –term Netflix targets to increase the profitability in International markets

2. In short – term Netflix aims to maintain and improve marginal profitability in domestic market

3. Aims to enter Chinese market (Unremarkably difficult as it is stated in Annual Report)

4.1.5 Financial Institutions assessment of Netflix, Inc.

In order to understand the market situation of Netflix better, the estimates of the value per share made by well-known global financial institutions are going to be shown below. Different methodology and presumptions of valuation are implemented, thus the indications alter from each other.

Organization:	Price Target of Netflix, Inc. share	Share price at the day of report	52-weeks range	52-week Total Return %	Rating	Measured WACC %	Terminal growth %	Date of the report
Deutsche Bank	90 USD	105.18 USD	130.93 - 82.79 USD	-4,9	Sell	12,5	n/a	09-Oct-16
Morgan Stanley	110.00 USD	100.59 USD	-	-	Overweight	9	2	12-Oct-16
UBS Evidence Lab	92 USD	100.59 USD	-	-	Neutral	12	3	12-Oct-16
Morningstar	69.00 USD	124.57 USD	-	-	Sell	n/a	n/a	30-Oct-16
Average:	90,25							

Table 4-1 Netflix Inc. stock price targets. Source: Deutsche bank, Morgan Stanley, UBS, Morningstar.

As it possible to see from the table above, the Price Targets per share of Netflix differ a lot. All 4 financial analysts expect price of the share to be lower than on the date of the analysis.

Only Morgan Stanley set a status "overweight", which states that firm's stock prices are better value for the money than others enterprises in the industry, for Netflix. Meanwhile, Deutsche Bank and Morningstar advices to sell/short stocks due to high level of risk and uncertainty of an industry. UBS Evidence Lab concluded their report by claiming stock price is a "Neutral".

Note: There is app. 3 months difference from the dates when reports were published and the date of today (06-Jan-2016). However, authors of project did not identify any significant information that could appear within this time range and could have impacted such a increase in the price of Netflix stock.

4.2   STRATEGIC ANALYSIS

4.2.1   VRIO

VRIO analysis can lead to important results and insights regarding resources of the company. It is used to find whether the resources of a firm are valuable, rare, and imitable and whether the company is taking advantage of them. Resource is considered to be valuable if a firm can employ it in order to expand, obtain a cost advantage or achieve a competitive advantage. Estimating whether a resource is valuable is the first step in VRIO analysis since if it is found not to be valuable then the rest of the steps in the VRIO framework become irrelevant. Rare resource means the same as when demand exceeds supply what leads to higher prices, competitive advantage and increased strength of the company. Competition can imitate rare resources and by doing it overcome the rarity issue. Imitable resources can't provide a firm with a long-term competitive advantage. In order for a resource to be useful for a firm in a long-term it has to be expensive and difficult to imitate. Particular laws in some regions or contracts and agreements signed by companies can play a role in preventing competition from imitating products or services also. In case a resource is valuable, rare and difficult to imitate a company can exploit it in order to gain competitive advantage, increase the revenues and strengthen the brand. (Chapman, 2002). VRIO framework for Netflix is shown below.

Resource	Valuable?	Rare?	Imitable?	Organization?	Competitive Advantage?
Large portfolio of products	YES	YES	NO	YES	LONG-TERM
Online Streaming	YES	NO	YES	YES	SHORT-TERM
International Service	YES	YES	NO	YES	LONG-TERM
Brand Loyalty	YES	YES	NO	YES	LONG-TERM
DVD Rental	YES	NO	YES	YES	SHORT-TERM

Table 4-2 VRIO analysis Netflix Inc. Source: Author's composition

Licenses to content and a therefore a very large content portfolio provides Netflix with a long-term competitive advantage since this resource is difficult to imitate. It is rare also taking into consideration the quality of it since the largest part of media offered to customers is highly rated and is of high quality. It is easy to obtain a large portfolio of movies or TV shows, however it is much more difficult to receive licenses to high quality content which has a large demand from consumers. TV series like House of Cards which achieved an international success helped Netflix to obtain a large amount of customers and a lot of attention is a very valuable resource which other firms might want to imitate but most likely wouldn't manage to do.

Online streaming service can be imitated and therefore it might not provide Netflix with a sustainable competitive advantage due to competition being able to imitate this resource. Netflix can be used as a service on many various electronic devices such as smartphones or tablets as long as there is an internet connection available. It is expensive to imitate for the competitors therefore even though it is very likely that there will be attempts to do that Netflix might keep this competitive advantage in the medium-term.

Netflix entering foreign markets resulted in expanding the customer base and strengthening the business compared to the competition. It is hard to imitate resources like content licenses, large network of partners and international agreements what leads to a sustainable competitive advantage as well. DVD rentals play an important role for the company as well, but this resource is exploited by other companies as well. Netflix has a mail delivery system different from competitors but this service is relatively easy to imitate.

It can be said that Netflix as a firm has many competitive advantages which management exploits and most of which are difficult to imitate for the competitors.

4.2.2 Analysis of historical performance

The subsequent sections aims to analyze the historical Netflix Inc. performance. The analysis outcome will provide an important input to the valuation of the company.

4.2.2.1 Operating result

First of all, it is important to determine if the company managed to create value for the shareholders in the past. For this reason, based on historical data, return on invested capital (ROIC) and weighted average costs of capital (WACC) were computed. The comparative results might be seen in Figure no 4.4 . It is important to note that WACC value has been calculated extensively based on historical data and no future factors included. Such choice seems to be
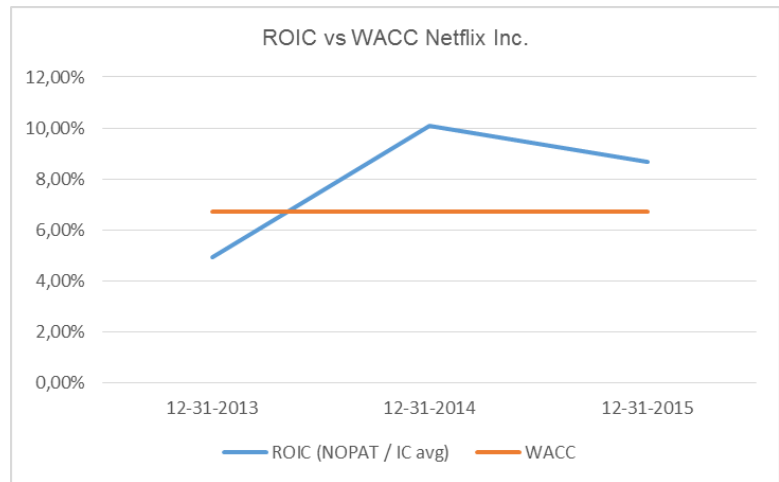
Figure 4-4 ROIC vs WACC Netflix. Source: Author's Compilation

logical as the past performance is to be assessed. The detailed WACC calculation is provided in the appendices of the thesis. As the graph shows Netflix Inc. were able to create the value for its' shareholders in the last two periods. Only in 2013 WACC exceeded ROIC it was mainly caused by the significant 25,8% increase in operating costs. The company in the annual report explains that they have acquired new contents for more 200 million USD and increased spending on marketing expenses on the international streaming segment. (Netflix Inc., 2012, s. 29). Consequently, it led to lower that year result and ROIC respectively.

4.2.2.2 Profit margin

Development in revenue

As mentioned before Netflix has three operating revenue sources: Domestic Streaming, Domestic DVD and International Streaming. The figure no 4.5 presents total revenue distribution among these business segments expressed as percentage of the total revenue. Certainly domestic streaming segment generates a lion portion revenues. On the other hand, the international streaming segment

has grown by 132% on average during the last 5 years compared with average 20% growth in the domestic segment; therefore, it might be assumed that the contribution of this segment to total assets will become more important in the future.
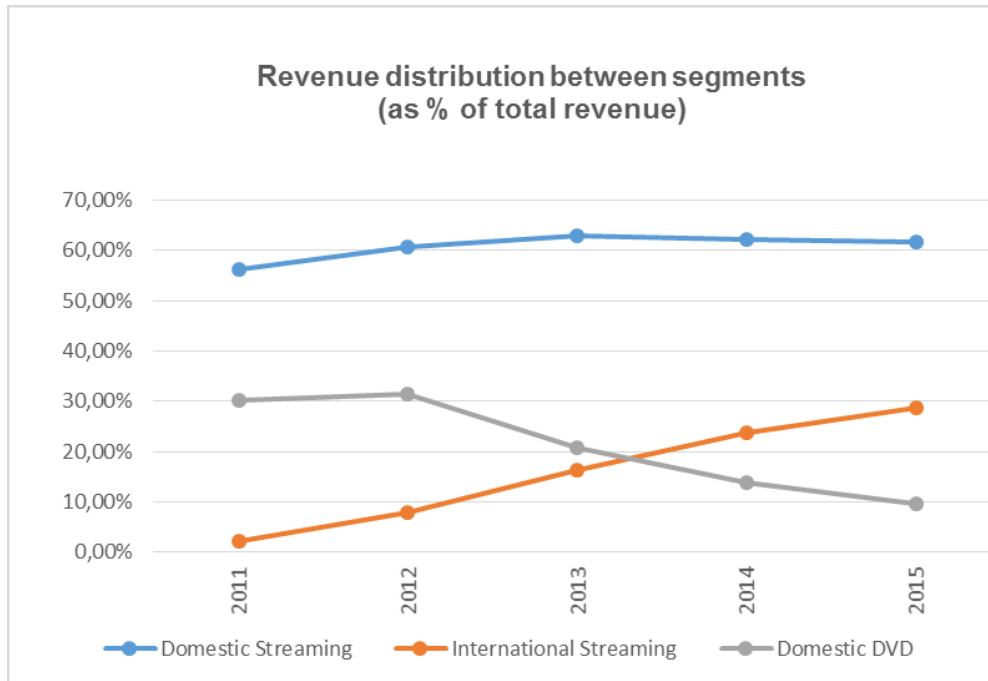
Figure 4-5 Revenue distribution between segments. Source: Author's composition based on Netflix Inc. financial statements.

In line with fast growing separate business segments the total revenue has grown quite steady in the past 3 years averaging 24% CAGR. The segmented revenue growth is presented in appendices. Such performance quite well reflects the company's internal ability to capture the industry growth and outperform the key competitors.
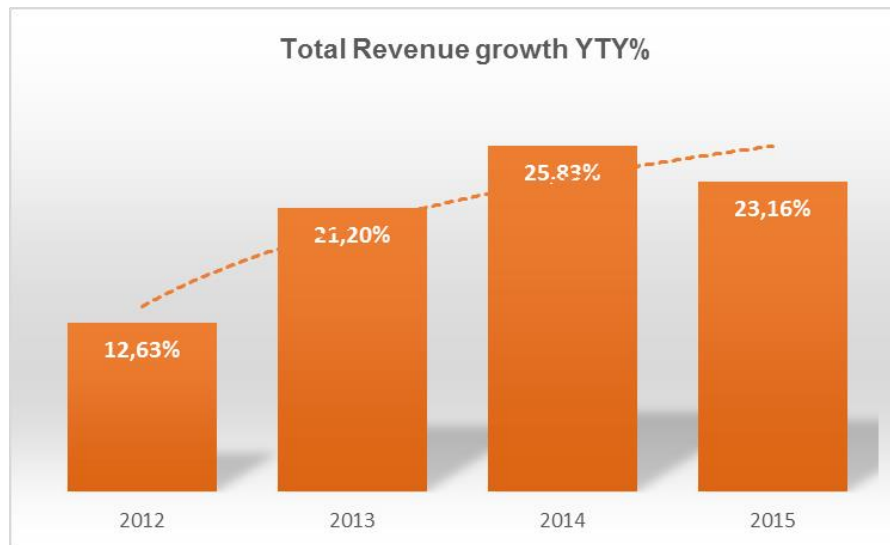
Figure 4-6 Total Revenue growth YTY%. Source: Author's composition based on Netflix Inc. financial statements

Development in operating cost

The operating costs had grown following the revenue growth trend by CAGR of 23,7%..The increase is mainly caused by acquisition of new contents, which is classified as cost of revenue. With constant increase in the customer base Netflix is odd to spend more on new content items as well as on technology supporting the whole business model. Moreover, Netflix has experienced a rapid growth in general and administrative expenses, which was mainly influence by increased focus on the international business segment and international market presence. Furthermore, it is important to note that increased marketing expenses on the domestic business segment, has not increased the revenues at the same rate. Therefore, it can be argued Netflix's marketing effort hasn't brought the expected results. The table below summarizes and represents the year-to-year growth of the operating costs.

Operating costs as % Δ YTY	2012	2013	2014	2015
Domestic Streaming	7,68%	25,93%	24,35%	22,18%
International Streaming	247,06%	147,75%	83,62%	49,34%
Domestic DVD	4,05%	-19,89%	-15,99%	-15,61%
Total Cost of Revenues	**28,73%**	**18,71%**	**20,39%**	**22,35%**
Domestic Streaming	-18,72%	18,64%	18,16%	29,31%
International Streaming	349,65%	61,87%	47,53%	54,26%
Domestic DVD		-21,17%	-15,83%	-18,39%
Total Marketing	**15,59%**	**0,98%**	**29,20%**	**35,72%**
Domestic Streaming	-24,33%	8,14%	-23,29%	56,13%
International Streaming	146,30%	5,70%	53,48%	61,43%
Technology and development	**27,01%**	**15,12%**	**24,70%**	**37,79%**
General and Administrative	**9,52%**	**29,70%**	**49,61%**	**51,01%**

Table 4-3 Operating costs as % Δ YTY Source: Author's composition

The total operating costs accounted for 95,49% in 2015, giving only 4,51% operating margin. Consequently, the company should optimize its operating costs in order to obtain healthier profit margin. The table below represents the year-to-year growth of operating costs. All in all, it might be concluded that the operating costs grows in line with the revenue, except particular items such as general administrative expenses.

The table below present the segmented operational contribution margin. It is calculated by subtracting all the costs associated with specific segment from the revenue generated by the segment.

Segmented Contribution margin					
Domestic segment	**2011**	**2012**	**2013**	**2014**	**2015**
Revenue	$ 2.029.123	$ 2.184.868	$ 2.751.375	$ 3.421.434	$ 4.180.339
Costs of revenue	$ 1.932.419	$ 1.570.600	$ 1.863.376	$ 2.201.761	$ 2.847.193
Marketing	$ 324.121	$ 245.259	$ 265.232	$ 203.453	$ 317.646
As % of Segment Revenue					
Costs of revenue	95,23%	71,89%	67,73%	64,35%	68,11%
Marketing	15,97%	11,23%	9,64%	5,95%	7,60%
Margin	**-11,21%**	**16,89%**	**22,63%**	**29,70%**	**24,29%**
International Segment					
Revenue	$ 82.850	$ 287.542	$ 712.390	$ 1.308.061	$ 1.953.435
Costs of revenue	$ 107.482	$ 483.295	$ 782.304	$ 1.154.117	$ 1.780.375
Marketing	$ 78.517	$ 193.390	$ 204.418	$ 313.733	$ 506.446
As % of Segment Revenue					
Costs of revenue	129,73%	168,08%	109,81%	88,23%	91,14%
Marketing	94,77%	67,26%	28,69%	23,98%	25,93%
Margin	**-124,50%**	**-135,33%**	**-38,51%**	**-12,22%**	**-17,07%**
Domestic DVD					
Revenue	$ 1.092.604	$ 1.136.872	$ 910.797	$ 765.161	$ 645.737
Cost of revenue	$ -	$ 598.163	$ 471.523	$ 396.882	$ 323.908
As % of Segment Revenue					
Costs of revenue	0,00%	52,61%	51,77%	51,87%	50,16%
Margin	**100,00%**	**47,39%**	**48,23%**	**48,13%**	**49,84%**

Table 4-4 Segmented contribution margin Source: Author's composition based on Netflix Inc. financial data.

The international business segment had never been profitable in the pasts and generated negative returns for Netflix. Relatively low contribution margin might be observed in the domestic segment as well. Consequently, leading to low overall operating margin which in 2015 accounted for 4,5%. The segmented operating margin is extremely important to for the future estimates of the net income of the company.

4.2.2.3 SPREAD

In order to see whether or not the financial leverage is creating value for its shareholders the spread is calculated. Leverage only increases the shareholders' value if the spread is positive – i.e. ROIC is higher than net borrowing cost (NBC). (Petersen & Plenborg, 2012, s. 118)

SPREAD Netflix Inc.	2012	2013	2014	2015
NBC	2,74%	8,36%	5,87%	8,70%
ROIC	3,91%	15,59%	17,64%	8,34%
SPREAD (ROIC-NBC)	**1,16%**	**7,23%**	**11,77%**	**-0,36%**

Table 4-5 SPREAD Netflix Inc. Source: Author's composition

The table above shows that SPREAD was positive in all years except for 2015, when NBC was the highest 8,7%. Consequently, it can be argued that Netflix have been able to create value for shareholders through financial gearing.

4.2.3 Common size analysis

Common-size analysis scales each item as percentage of revenue and it reveals the relative size of it. The table presented bellow gives and insight on Netflix Inc. operational development.

Annual Income Statement commonsize as % of revenue					
Period Ending: 31Dec	**2011**	**2012**	**2013**	**2014**	**2015**
Total Revenue	**100%**	**100%**	**100%**	**100%**	**100%**
Domestic Streaming	56,22%	60,53%	62,89%	62,16%	61,66%
International Streaming	2,30%	7,97%	16,28%	23,76%	28,81%
Domestic DVD	30,27%	31,50%	20,82%	13,90%	9,52%
Total Cost of Revenues	**56,52%**	**72,75%**	**71,26%**	**68,17%**	**67,73%**
Domestic Streaming	53,54%	43,52%	42,60%	40,00%	42,00%
International Streaming	2,98%	13,39%	17,88%	20,97%	26,26%
Domestic DVD	0,00%	16,57%	10,78%	7,21%	4,78%
Total Marketing	**11,16%**	**12,89%**	**10,74%**	**11,03%**	**12,16%**
Domestic Streaming	8,98%	6,80%	6,06%	3,70%	4,69%
International Streaming	2,18%	5,36%	4,67%	5,70%	7,47%
Technology and development	7,18%	9,12%	8,66%	8,58%	9,60%
General and Administrative	3,52%	3,85%	4,12%	4,90%	6,01%
Total operating cost	**78,37%**	**98,61%**	**94,78%**	**92,69%**	**95,49%**
EBITDA	**11,63%**	**2,64%**	**6,33%**	**8,30%**	**5,43%**
Depreciation	**1,21%**	**1,26%**	**1,11%**	**0,98%**	**0,92%**
EBIT	**10,42%**	**1,39%**	**5,22%**	**7,31%**	**4,51%**
Corporation tax, reported	-3,70%	-0,37%	-1,34%	-1,50%	-0,28%
Tax shield, net financial expenses	-0,17%	-0,24%	-0,45%	-0,23%	-0,33%
NOPAT	**6,55%**	**0,78%**	**3,43%**	**5,59%**	**3,90%**
Non-Operating items					
Interest and other income (Expense)	0,10%	0,01%	-0,64%	-0,06%	-0,46%
Interest Expense	-0,55%	-0,55%	-0,67%	-0,91%	-1,96%
EBT	**9,96%**	**0,84%**	**3,91%**	**6,35%**	**2,09%**
Income Tax	3,70%	0,37%	1,34%	1,50%	0,28%
Minority Interest	0,00%	0,00%	0,00%	0,00%	0,00%
Equity Earnings/Loss Unconsolidated Subsidiary	0,00%	0,00%	0,00%	0,00%	0,00%
Net Income-Cont. Operations	**6,27%**	**0,48%**	**2,57%**	**4,85%**	**1,81%**
Net Income	**6,27%**	**0,48%**	**2,57%**	**4,85%**	**1,81%**
Net Income Applicable to Common Shareholders	**6,27%**	**0,48%**	**2,57%**	**4,85%**	**1,81%**
Effective Tax rate	**37,10%**	**43,73%**	**34,30%**	**23,63%**	**13,56%**

Table 4-6 Common size Income Statement as % change YTY. Source Author's composition based on Netflix Inc. financial data.

The main revenue and the cost driver for Netflix Inc is the domestic business segment, however is rather stable over the last periods compared to a rapidly increasing growing international business segment. In contrast, the diminishing contribution of domestic DVD segment might be observed as well and in 2015 was three times lower than in 2011. The total marketing expenses had fluctuated between 11% and 13% and were rather stable. However, the international market oriented marketing has increased from 2,18% to 7,47% during the 4-year period. That quite well indicates, before mentioned, Netflix Inc. increased focus on the international market.

4.2.3.1 ROE

Return on equity is a ratio, which shows the returns available to equity holders of a company. ROE has to be higher than required rate of return in order to fulfill the equity holder's expectations. The chart compares those two elements as it shows that Netflix were able to generate positive ROE in all analyzed period. Moreover, ROE were higher in than costs of equity as well. Therefore, it can be said that Netflix Inc. managed to fulfill and exceed the shareholder expectations.

ROE, Netlix Inc.

	2012	2013	2014	2015
ROE	4,58%	18,72%	22,75%	8,05%
Cost Of Equity	6,81%	6,81%	6,81%	6,81%
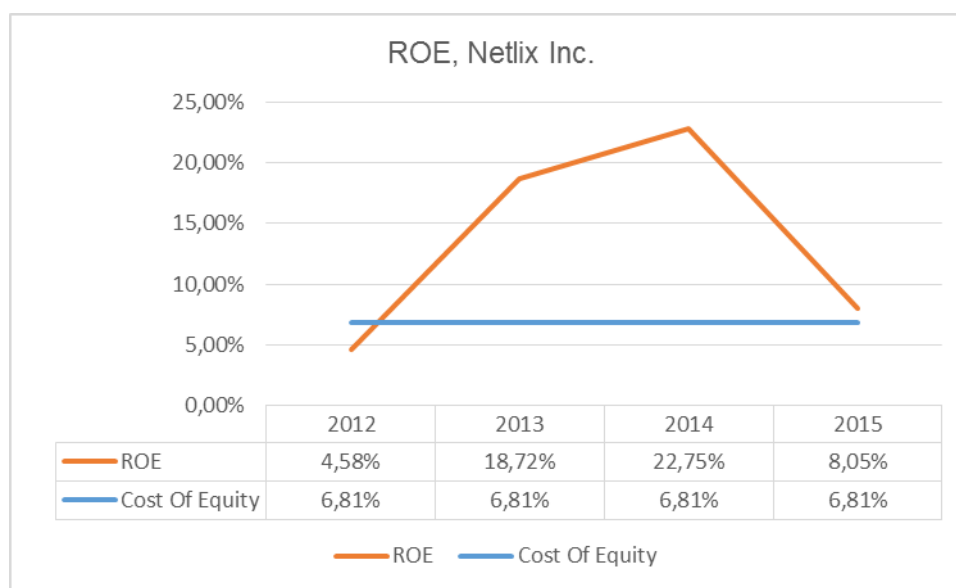
Figure 4-7 ROE, Netflix Inc.Source: Author's composition

On the other, hand ROE was quite volatile and in 2015 decreased by 14,7% compared with 2014. Such significant decrease was mainly caused by growth in the total operating expenses, which consequently led to lower operating profits and lower ROE.

Liquidity is an element which is vital for any company. Lack of liquidity can lead to many issues and negative experiences with the worst one being bankruptcy of a company. Short-term liquidity risks indicates company's ability to meet all the short-term obligations with the long-term liquidity risk indicating ability to meet the long-term obligations. Positive net cash flows lead to low liquidity risk which is a vital element for the company's success.

4.2.3.2 Liquidity analysis

Short-term liquidity risk

Liquidity cycle which is a measure of short-term liquidity increased in the historical period analyzed what is a negative aspect for Netflix's liquidity. Liquidity cycle shows the amount of days needed to convert working capital to cash therefore the lower the figure, the better the cash flow is.

Current ratio measures current assets against current liabilities, therefore a high ratio indicates that current assets can easily cover current liabilities. For Netflix the ratio was relatively stable during the analyzed period around 1.5 what shows that the situation regarding current assets and liabilities was solid however there is a place for improvement.

Long-term liquidity risk

Long-term liquidity risk can be measured by using various ratios, some of which are discussed below.

Financial leverage was equal to approximately 0.75 throughout the years from 2011 to 2015 with solvency ratio being rather stable as well around 0.3. High financial leverage combined with low solvency ratio indicates high long-term liquidity risk. For Netflix discussed figures were stable but an increase can be seen in 2015 indicating existing and growing long-term liquidity risk due to higher leverage and lower solvency ratios.

Cash flow from operations to debt ratio indicates by how much the current cash flow from operations can cover the liabilities. In Netflix's case the ratio was low varying around 0 and becoming negative in 2015. This indicated negative long-term liquidity risk situation since the company wouldn't be able to repay the liabilities with the current cash flow.

The overall liquidity risk is rather high, however some ratios such as current ratio indicates quite solid situation.

4.3 External and industry analysis

The subsequent parts of the thesis aims to assess the external business environment in which Netflix Inc. currently operates. The analysis output is further used in formulation the forecasting assumptions.

4.3.1 PESTEL analysis

Netflix similarly to most of the other companies in the world is highly affected by various external factors, them particularly being political, economic, social and technological. The mentioned aspects will be assessed in order to gain a better understanding of how and to what extent they affect Netflix's business.

Political

Netflix is dependent on laws regarding online piracy with it being a big threat. Successful termination of websites which violate the copyrights would affect Netflix's business positively with people not being able to illegally download and watch movies or TV shows. Particular laws in some countries could lead to Netflix being not able to operate there due to religious or ethical aspects. There are some regions or countries where specific content is restricted such as violence or nudity on the screen. In the beginning of 2016, Netflix has been blocked in Indonesia, by the country's biggest internet service provider. The reason of such action was reportedly caused by the concerns regarding the contents Netflix provides and a failure to have specific business permits required by Indonesia's laws. Such restrictions and similar issues have a significant impact on Netflix's profitability, expansion plans and the market share. Indonesia is one of the most populated countries in the world and even though technological conditions in the country might not currently allow to fully explore its potential, the rapid advancement and growing people needs are expected to influence the change regarding this matter.

China being one the most important markets for many of the international companies was not a success for Netflix where it failed to start operations in. Netflix has cancelled the plans to enter the Chinese market which reportedly has 1.4 billion potential customers due to strict regulatory environment for foreign digital content services. Netflix will license content to local Chinese companies instead of starting its own service in the country. (money.cnn.com, 2016)

Economical

High unemployment rate means people having less income, however at the same time it means that people spend more time at home and might chose Netflix as a source of entertainment. Netflix not being a luxury service it is financially obtainable in good economic conditions as well as in bad ones for most of the people. The overall economic situation was solid in the analyzed period in the main region for Netflix, the U.S. with main economic indicators showing growth. S&P 500 index is known to be a good provider of the view towards the health of the U.S. and the whole world's economy overall. From the chart below it can be seen that S&P 500 index was in a clear uptrend and it is currently rising with minor corrections. Netflix is included in the S&P 500 index as well, which contains 500 largest U.S. companies measured by market capitalization.

Figure 4-8 S&P500 Index Historical Price Source: markets.ft.com

Netflix is an international company and it is therefore exposed to numerous economic risks such as interest rate risk. United Kingdom being an important market for Netflix and a recent vote to leave the European Union lead to weakening GBP compared to most of the other currencies and therefore lower profits for the company.

Social

Netflix is active and highly involved in social media, being active on platforms like Twitter or Facebook. It communicates with people through the social media and responds to their comments, suggestions or complains fast and in an appropriate manner depending on the type of the customer. Netflix is easy to use and is adapted to be suitable for all the generations. Almost all of the families in advanced countries have a TV and a wireless internet at home what makes Netflix easily accessible as a service.

Traditional television is losing popularity in the U.S. and Europe with this trend expected to continue and start taking place in other regions as well. TV commercials are losing popularity and their effect on consumers might not be perceived as strong as before also because the younger generations don't watch TV as much as the older ones used to. The use of mobile phones, tablets and laptops is very high among young people what pushes them towards a need to be able to watch their favorite TV programs or movies not regardless of their location or time of the day.

Technological

Internet quality is developing rapidly with the speed of internet being as high as ever before what allows the quality of streamed videos to be as high as ever before also. Mobile data usage is growing significantly worldwide as well what shows that people continue switching to portable devices. In 2015 global mobile data recorded a growth of 74% compared to 2014 with it growing 4,000-fold counting from 2005 and 400-million-fold counting from the year 2000. More than 500 million new units of mobile devices were supplied to the market in 2015 alone with average smartphone usage growing 43% in the same year considering the amount of traffic per smartphone. Future forecast regarding the mobile-connected devices is bright what is a positive aspect for Netflix. It is expected that the number of mobile-connected devices per capital will be 1,5 by 2020. (cisco.com, 2016)

4.3.2 Porter's Five Forces Analysis

Porter's Five Forces tool is going to be applied on Netflix, Inc. and industry where firm is operating in order to structure analysis. This tool will improve analysis to determine level of competition of an industry and business strategy development. Gathered information in this section will allow us to foresee and predict possible company short and long term growths. Therefore, analysis is made in a design that it would be simple to use information in the part of Forecasting. Statistical data analyzed in this section is extremely important in determining the potential market of Netflix.

Overview of the Netflix Industry

Most of the analysts state Netflix is operating in Internet Commerce industry. However, this definition is to broad as such companies like Google, Amazon are also included in the same industry, even though they do not serve exact the same product as Netflix. Therefore, in this section of the project a brief analysis of an industry is going to be represented.

Important Note: Since Netflix is a dominant player of a TV and movie streaming industry, firm's statistics of Domestic and International markets are going to be represented.

Important Note 2: Only a segment of TV and movie streaming online is going to investigated as industry of DVD and Blu – Ray CDs renting is expected to collapse in short-term future, meaning that it will not have significant impact on Netflix financial results in long- term.
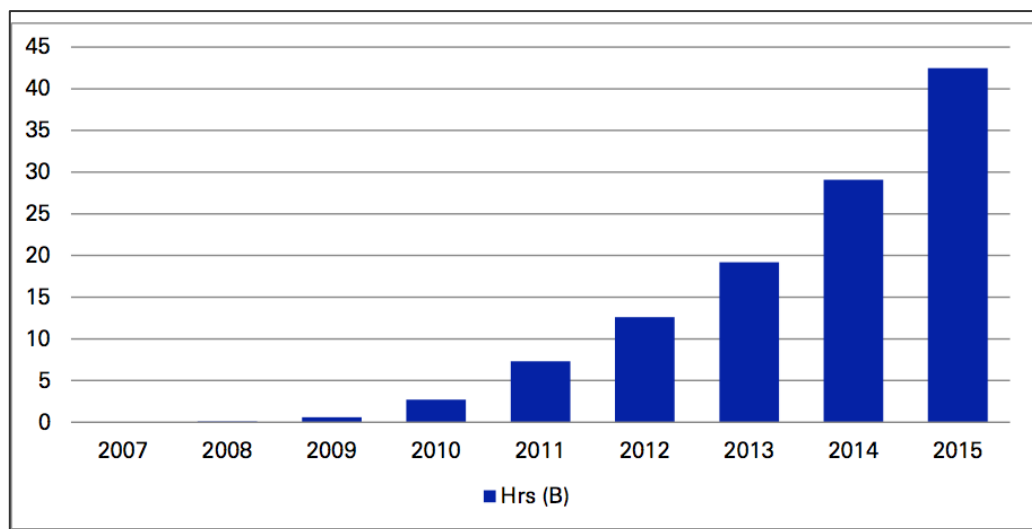
Figure 4-9 Hours of Netflix Content Streamed Globally (Kraft & Griffin, Company Report Netflix Inc., 2016)

As it is possible to see form the graph above, the rapid increase of hour's watched TV serials and movies is detected. This happening could be explained due to few reasons: 1. The global demand of online movies and TV shows is increasing 2. Netflix has designed a good strategy of marketing that attracts people to watch streamed content online. Therefore, obvious conclusion could be made that Netflix is operating in growing industry where huge potentiality is expected.

2014 Top 100 US Films, % of Local Box Office

Country	% of Local Box Office
China	43,00%
Japan	20,00%
Europe	49,00%
United Kingdom	79,00%
India	6,00%
South Korea	38,00%
Russia	65,00%
Australia	76,00%
Mexico	75,00%
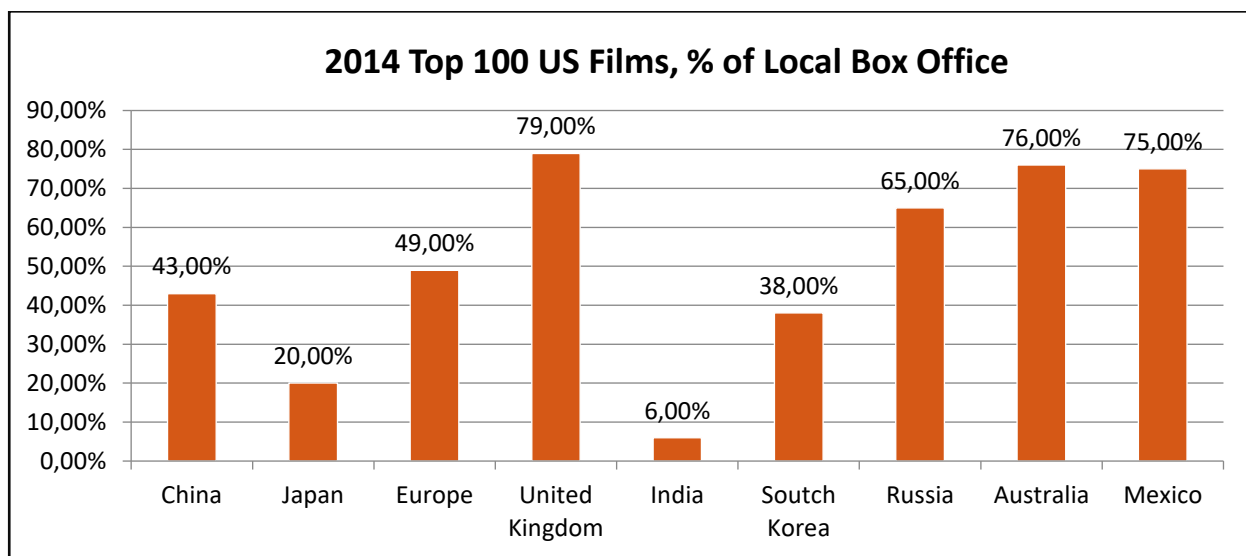
*Figure 4-10 **2014 Top 100 US Films, % of Local Box Office** (Kraft & Clay Griffin, Company Report Netflix Inc., 2016)*

Table above shows the spread of US made content around the world. As Netflix is mostly producing TV shows and movies that are created in United States, it's essential to know the popularity of such content in order the potential size of market could be determined later on in this project. The difference among nations appears due to simple reasons – the native language in the country and ability to speak/understand English language in particular country. In the instance of Mexico, assumption could be made that geographical position of the country has also influence on TV watching preferences. According to Netflix annual report 2015, taste of TV content alters around the world. Citizens of India, Japan are keen on watching different kind of content that is more closely related to their local culture or taste of TV programs.

Significant impact on Netflix Revenue European market has. Buying power in Europe is relatively high even though it alters among separate countries: Western Europe has stronger buying power then Eastern part of the content. In addition, US made material is more popular in the North West side of Europe (Scandinavia, Germany, Netherlands etc.) than in the South (France, Spain etc.) because of the different level of ability to understand English content.
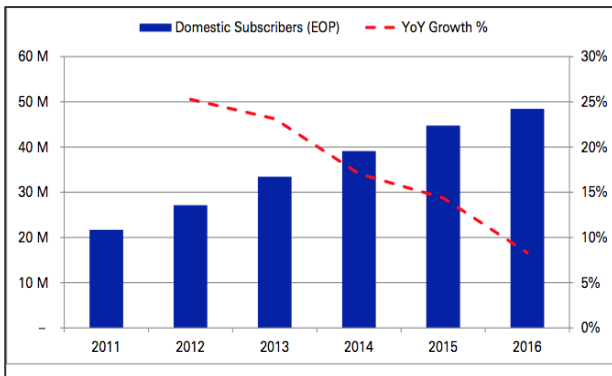
Figure 4-11 Domestic Streaming Subsribers (Kraft & Griffin, Company Report Netflix Inc., 2016)

Figure 4-12 International Streaming Subscribers (Kraft & Griffin, Company Report Netflix Inc. , 2016)

Another statistical data, which is going to be important in the part of Forecasting, is the pace of the growth in different Netflix market segments. From the information in the tables, the growth size alters in International and in US markets. United States market is almost fully conquered by Netflix, thus increase of subscribers is slower than in International countries where Netflix is counting its first years of existence. Growth of customers in Europe reaches impressing amount of around 50% a year, while US market is showing average decline of 5% of subscribed viewers from 2012 to 2016.
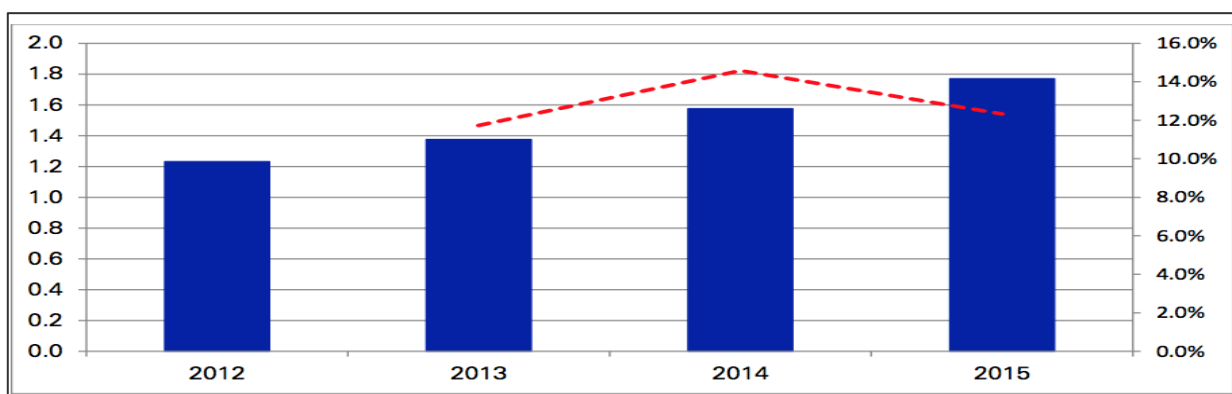
Figure 4-13 Hours Streamed per Subscriber/Day (Kraft & Griffin, Company Report Netflix Inc. , 2016)

Hours streamed per subscriber/day are growing too. This statistical component might not have direct influence on the Revenue of Netflix as long as company does not decide to change pricing model.

However this data again proofs the increasing demand of TV streaming content. Furthermore, this growth could be one of the leading indicators predicting Terminal period Revenue.

4.3.2.1 Rivalry among existing competitors

According to Wright Investors Service, there are 3 main competitors that Netflix is competing against.

Competitor	Sales, USD billions	Comment
Interpublic Group of Companies Inc	7.61	Out of whole sales 81% was IAN
Regal Entertainment Group	3.13	Out of whole sales 100% was Theatre Group
AMC Entertainment Holdings Inc	2.95	Out of whole sales 100% was Theatrical Exhibition

Table 7 Competitors (Research, 2017)

All these 3 dominant oponents in the market are competetive in regards of their size, revenue etc. However, they are serving only similar kind of product. Thus, due to this reason it's nessecary to conclude that they are **indirect competitors**.

In the annual statement of Netflix, insiders of TV streaming enterprise identified the main cause why Netflix faces with an intensive competition – **existance of pirated content providers** . Netflix does not have strong competitive advantage against BitTorrent etc. and other local illegal distributors.

Moreover, other indirect competitors are **multichannel** video programming distributors ("MVPDs"), which provide same content that Netflix does. There are thousands of TV channels in the world. The way how Netflix exposes its competitive advantages of being online based provider is by striving for consumers to choose Netflix services in watchers free time. In other words, company states that they want to win the "moment of truth", which is identified as their unique design, control panel etc. (Netflix, 1015)

Taking whole Internet Commerce industry (including such companies like Amazon, Yahoo etc.) into investigation, Netflix takes relatively huge part of the **Market Share**. Netflix Revenue is $US6.8 billion (3.9% of aggregate sector revenue of $US173.5 billion; up from 3.9% in the previous year). **Net Profit** of $US122.6 million (2.6% of aggregate sector net profit of $US4.6 billion; down from 10.0% in the previous year).

EBIT of $US274.6 million (4.8% of aggregate sector EBIT of $US5.7 billion; down from 10.3% in the previous year). (Buysellsignals, 2016)

Furthermore, there are some direct competitors in foreign markets. Those US made TV show and movie providers are not huge globally, however they could increase competitiveness and reduce profit margins in different countries.

In addition, Amazon has launched its new service – Amazon Prime that is offering same type of TV shows and movies for their subscribers.

Future Prospects:

- Governments and regulators of authorized intellectual property might reduce the volume of pirated content providers
- Not many direct competitor that could influence Netflix profitability in short - terms
- Rapid change in Internet Commerce industry might bring new competitors
- Small, but important competitors in International markets

4.3.2.2 Threat of new entrants

According to the practice, the one of the most adorable type of industry is where entry barriers are high and exit barriers are low if the company already exists in the industry. Internet Commerce – TV show streaming industry where Netflix operates in has such features.

Positive signals

One of the positive features that Netflix has is its intellectual properties, patents, trademarks, service marks, copyrights, domain names, trade dress, trade secrets, proprietary technologies. Therefore, new competitors might not be able to copy the same business strategy as Netflix does.

Secondly, the huge load of library of content that Netflix has collected during its existence is determined as Fixed costs (however, Dep. level of these assets is high), thus new players of the market would need to invest a lot in order they could compete with Netflix in the segment of older created TV shows, movies and so forth.

Thirdly, company is maintaining M&A strategy in order to increase the synergy and economics of scale of the operations.

Additionally, margins of operations of Netflix are high and have increased since 2014 (In FY2015, its operating costs as a percentage of sales stood at 95.49% as compared to 92.69% in 2014). On the one hand, that is a negative feature from the perspective of the company. On another hand, that reduces attractiveness of an industry.

Negative signals

The growth of an industry is expected, demand is forecasted to increase, according to Global Data report (GlobalData, 2016). Consequently, in long-term it might attract new entrants into the market.

Moreover, Netflix has been resulting sustainable growth in Domestic market, however it does not have lots of experience and knowledge of customers' TV watching behavior abroad. Due to this reason, new competitors abroad, which know the local market tendencies better, could have competitive advantage against Netflix. On another hand, most of the TV production is made in US, accordingly new market players in the international market would probably not have same access to the content as Netflix (Kraft & Griffin, Company Report Netflix Inc.).

Future Prospects:
- Netflix has extensive range of the content that is expensive Fixed Asset – a significant barrier for new entrants
- Good recognition of the brand around the world
- Main distributors of the content are from US remain
- Threats in the overseas markets

4.3.2.3 Threat of substitutes

In the industry of Internet Commerce and TV streaming, Netflix is a predecessor and named as a producer of substitute product.

The biggest threat of substitute Netflix is a pirated content providers, such like BitTorrent and other illegal websites. However, governments of countries are fighting against intellectual property thieves and have intrinsic motivation to do so because pirated material providers are not taxed.

Secondly, previously mentioned competitors which are providing other type of services like theater shows, exhibitions and etc. could be named as a substitute product for Netflix. On other hand, they are targeting different type of customers. In addition, the younger generation is meant to consume more Netflix services.

All other free time activities like sports, travelling and so forth are substitutes for Netflix. According to the current tendencies, younger generation is spending more and more time on their PC's. smart phones. Therefore, the online TV show and movie streaming is expected to become more popular in the future.

 Switching from Netflix services to any kind of other type of free time activity, including changing TV show and movies provider, is inexpensive and easy to do. Customer of Netflix is able easily to cancel his membership.

Netflix services are being sold at relatively very low rates: Basic Membership starts from 5,4 EUR/month and most costly monthly Premium membership is up to 12 EUR. Due to this reason, Netflix price is very competitive among possible substitutes.

Multichannel cable TV is also substitute for Netflix services. Even nowadays online TV streaming becomes more and more popular, however old fashion cable TV programs are also on demand.

Future Prospects:

- Level of watching movies and TV shows among other free time activities is expected to increase in short and long term future
- Ease and cheap to cancel membership

4.3.2.4 Bargaining power of customers

There are very few online TV streamers that offer US made content for people. Therefore, the bargaining power for customers is meant to be low.

However, the switching costs Netflix production to substitutes is very low. Therefore, bargaining power of customers increases.

Furthermore, some of multichannel TVs show the same content as Netflix does. The competitive advantage of Netflix is that it offers viewers ability to watch their favorable serials any time and on any device that has access to Internet.

Increasing number of competitors in international market increases the bargaining power of clients.

In overall, bargaining power of customers is small since Netflix is a dominant player of the market.

4.3.2.5 Bargaining power of suppliers

Bargaining power of suppliers is moderate. Suppliers (mainly Hollywood) of TV serials and movies do not have much of variable costs to serve production to Netflix. Mainly suppliers are paid by fixed amount of fee, or their compensation is based on the amount of viewed content by members of Netflix.

Negative aspect is that Netflix results are significantly depended on their suppliers' production popularity among people. If Hollywood produces new serial that becomes attractive by customers, there are higher chances that Netflix would acquire new subscribers. Therefore, degree of dependency upon existing channels of distribution is high.

There is a risk that if new competitor would appear in the market, the prices and conditions of partnership with suppliers might change negatively.

Furthermore, product that Netflix is buying is easy and cheap to produce. It does not require huge warehouses and/or logistics to run business. Within several minutes after serial was publishes, customers are able to watch it around the world.

4.4 CONNECTING ANALYSIS SWOT

The following section of the thesis uses SWOT analysis as a framework to summarize the key findings form previously performed internal and external analysis. It will provide an overview of the current Netflix Inc. position as well as will give insights to the expected future performance scenarios. The table below summarizes the key findings.

Strengths	Weaknesses
• **Market position** • **Company's performance in domestic streaming segment** • **Increased consumer base**	• **Higher operating Costs** • **Localaziation of contents** • **Difficulties overcoming international laws**
Opportunities	**Threats**
• **New Content** • **Customer spending** • **Industry growth** • **International market penetration**	• **Market competition** • **Technological Changes** • **Expensive licensing**

Table 4-8 SWOT analysis of Netflix Inc. Source: Own composition

4.4.1 Strengths

Market position

According to the Netflix Inc. annual report dated 2015.12.31, the company offers to its' customers more than 125 million hours of contents per month. This includes TV shows, original series, documentaries and featured films. Netflix currently provides services in 190 countries and accounts over 75 million subscribers worldwide. However, it is important to mention that more than 50% of the customers are localized in US market. Partnership with manufacturers such as LG or cable television providers such as Telecom Italia has substantially increased the company's market presence. In addition, availability of the services on the other internet-connected devices has also given a robust competitive edge over the key competitors.

Company's performance in domestic streaming segment

With no doubt the US market so called "Domestic Streaming segment" is the major contributor to Netflix's revenues. In 2015 this segment accounted for 61,66% of the company's total revenue and has increased by 22% year over year. The increase was mainly influenced by the increased number

of paid memberships by 15%. Such improvement in company's main revenue segment has strengthened the business operations in general.

Increased consumer base

In FY 2015 Netflix Inc. has added a total of 17,3 million new customers; 5,6 million in domestic streaming segment and 11,7 in international streaming segment respectively. It had definitely a positive impact on strengthening the company's operations and its' market position. Moreover, a rapid increase in the international streaming segment also contributes to the revenue diversification.

4.4.2 Weaknesses

Higher operating Costs

As the financial reports shows Netflix Inc. has relatively low operating margin in to 2015 it was only 4,5% compared to 7,31% over the year before. Consequently, the operating costs accounted for 95,49% and 92,69% respectively. Such increase naturally leads to lover operating income. Therefore, the Netflix management has to focus on improving its operational efficiency.

4.4.3 Opportunities

New Content

The unique product or in this case unique content, which fulfills the customer expectations and needs is the key to every organization. Therefore, Netflix focuses on adding new series, shows and documentaries constantly. The opportunities might mainly be seen in adding the content which is geographically localized as well as oriented to the international audience. Amazon in 3rd quarter 2016 has launch "The Grand Tour" spending millions on controversial show. Of course, it is naïve to expect that previously the most watched TV show will reach previous glory. On the other hand, it build a base to attract the subscribers interested in automotive industry with no doubt. Therefore, this is a good example of opportunities underlying in the market, showing how new unique content can attract the new customers.

Customer spending

It might be assumed that the company may benefit from the increase in consumer spending. As Bureau Of Economic Analysis (BEA) data shows the consumer spending in the US has increased by 0,5% in 2015 (Bureau of Economic analysis, 2016). Moreover, similar trends may be observed on the global scale.

Industry growth

According to estimates the worldwide media and entertainment industry should account for 2,23 trillion USD by 2019. As one of the leading companies in the industry Netflix Inc. may well expect to capture a significant portion of this growth. Moreover, the recent trends reveals the change consumers' preference towards renting movies than purchasing. Such trend should also positively impact the market revenues and Netflix's subsequently.

International market penetration

11,7 million increase in subscribers in the international streaming segment might seem to be relatively substantial and with no doubt is. However, it could be even bigger if focusing on localized contents, which would represent the customer requests. The opportunity to apply the experience obtained in the domestic market to catalyze the penetration in the international market, should be one of the Netflix's focus areas in the future.

4.4.4   Threats

Market competition

The company operates in very intense competition market. The competition is as well as geographically based and industry based. The industry players compete not only for the end customer but also for the supplier; in this case the content author. Netflix Inc. faces the competition from the companies offering subscription entertainment services such as Showtime, HBO, Amazon etc. Moreover, a regional and international retail chains of DVD products such as Blockbuster Inc. are also quite serious competitors, able to capture the market share of the industry. The intense competition poses a serious threat to Netflix's existing as well as future market share.

Technological Changes

The business model of Netflix Inc. is directly linked with rapidly changing technology. New devices, different video quality standards require the company to be ahead the global technological development in order fulfill the customers' needs and preferences. Inability to understand fast changing technological advances and general landscape could seriously impact the Netflix Inc. competitive position and performance consequently.

Video Piracy

The company and the industry in general face video piracy threat especially through P2P networks as torrents. In spite of legislative punishments this threat is still actual particularly on the international scale. Game of Thrones was the most pirated TV show in 2014 with more than 8,1million downloads accounting to hundreds of millions losses for HBO. Due to piracy the market losses billions of dollars every year. The advanced protecting systems and law maker's initiatives might reduce this threat but it might also be assumed that this threat will still be a serious concern to the companies in the future.

4.5 FORECASTING

In this section of the project, the theoretical part is applied on the case of Netflix fair value valuation to draw the possible future projections of the enterprise. Different internal and external segments and factors that have influence on Netflix value are investigated according to the described methods before.

Furthermore, the methodology is represented how calculations are made. In addition, explanations and arguments of computations are provided.

4.5.1 Income Statement

In Theoretical Chapter of this thesis different methods and relevant aspects of the Forecasting for high – growth companies, when using Discounted Cash Flow valuation approach, basics are discussed. The theoretical framework is structured, which is applied on Netflix instance.

Firstly, the Revenue of Netflix is measured since it has significant impact on other financial items of the firm. Afterwards, all the rest Income statement items are investigated subsequently. In order to follow the framework of theoretical part and to make future projections of the company more understandable for readers, all 3 qualitative methods (Market Research, Historical/ Relative Comparison, Visionary method) and Quantitative models (Leading Indicator, Economic Input / Output model) are provided in brackets after these methods be applied on forecasts.

4.5.1.1 Revenue

The most important and interesting part of Forecasting is predicting Revenue for Netflix Inc. In general, forecasting Revenue for the high – growth companies is complicated task since the rates of growth are usually relatively very high, but they are not expected to remain forever. Therefore, the most essential task was to determine the growth stages of the Netflix Revenue (Growth Period, Transition Period and Terminal Growth Period). The flow of forecasting Revenue:

Domestic Market.

The pace of slowing growth of new subscribers (from 2011 – 2016) was measured – (-26.17%), see appendix no.9 . The rate of new subscribers is predicted to reduce as long as it will reach the Terminal

Growth (est. 2026). Domestic market is not expected to grow at the higher rates since Netflix has conquered a huge proportion of the market and without new product. This method of forecasting is a standard forecasting method based on historical tendencies.

International Market

Theoretical chapter and description of innovative forecasting methods has the biggest implication in drawing future projections for Netflix International Streaming segment.

In order to measure the potential future market, which is in this instance – International Segment, the exact amount of possible Netflix product subscribers has to be estimated as much precisely as possible. Methodology of calculations:

a) Total population of the countries where Netflix is providing its services is counted (*Economic Input / Output model*). Appendix no 10.

b) Firstly, by using the 1st Discount Ratio – which is a popularity of US made TV content in segmented areas, the amount of total population is discounted (*Leading Indicator* and *Market Research*).

c) Since the buying power of different counties (They are segmented according to the content where nation geographically is located) is significantly different, the Discount Ratio is measured by taking into account GDP/Capita ratio (*Leading Indicator* and *Market Research*).

d) The third Discount Ratio is a percentage of conquered market in US by Netflix – 15.41%. After this Discount Rate is applied, the future amount of subscribers in foreign market is identified – 255,76mln.., see Appendix no 11 (*Leading Indicator* and *Market Research* and *Historical/ Relative Comparison*).

Note: the period of time, when 255,76mln. subscribers is going to be achieved, is expected to be within 9 years. It's the same length of time until 15.41% of US market was conquered. See appendix no 11.

DVD rental market

The popularity of this segment is rapidly decreasing. In addition, the higher level of competition has impact on negative growth rates of this segment – (-14.61%/ year). It's assumed that this

segment is going to be reducing until it becomes not profitable to maintain this service at all (Visionary method *and* Economic Input / Output model).

The growth stages

As it is mentioned in the Theoretical Part of the project, Transition period of growth could appear. In the case of Netflix, such a period is detected - between 2017 and 2025.

Growth Stage

The period till the end of 2016 is expected to be the company's Growth Stage. Both Netflix segments (US and International markets) have been booming so far and showing impressive Revenue growth rates.

Transition period

Since the Revenue is not expected to grow a lot in domestic market, but intensive growing is foreseen to remain in International market, a period from 2017 – 2025 is going to be a Transition period. This period of time is the same as the time that took for Netflix to reach 15.41% of the US market. During this period, Netflix is predicted to gain new 71,92mln. subscribers. Additionally, as Netflix is expanding to the markets where Internet still has not developed the same as in US, the Revenue is forecasted to increase by additional 13.09% a year (average growth of Internet Users, see appendix no 11).

Terminal Growth

Terminal growth is expected to be moderate 2% growth. This is a conservative average standard growth of the market that is being used for Terminal period.

4.5.1.2 Total Cost of Revenues

The following items are forecasted extensively using their percentage ratio to the total revenues. Historically based stable correlation between the total costs of revenue and the revenue is observed. However, as it was discussed in the profitability analysis of Netflix Inc. the operating margin is relatively low at the moment and it might be expected to increase towards the stable growth period.

Moreover, the annual report revealed the company's target to have 40% contribution of the domestic streaming concept by 2020. (Netflix Inc., 2015, s. 23) It is also assumed that Netflix will not change their operating structure within the forecasted period. Consequently, amortizing the content assets using the same methodology as previously and expensing it as the costs of revenue. These assumptions were used to forecast the future development of the costs of revenue.

Domestic Streaming

The historical tendency shows that the contribution margin of the domestic streaming concept is constantly increasing; consequently lowering the costs to revenue ratio. It is forecasted that the revue costs of domestic streaming will follow the historical tendency and will reach the targeted 52,5% level of the segment revenue in 2020. This target is a company's long term target; moreover, the revenue growth in the segment signalizes about the stable-growth stage. Therefore, this item as % of revenue is expected to remain stable after 2020.

International Streaming

International streaming costs of revenue are forecasted using the same methodology. However, the contribution margin target is set as 20% for 2020 and for 40% in 2026. The reasoning underlying such assumptions is based on the segment life cycle and the domestic segment's historical development. Following these assumptions, the contribution margin of this segment should reach the positive level in 2017. Furthermore, it is forecasted that, the cost of revenue in international segment will account 70% of the revenue in 2020 and 52,5% in 2026.

4.5.2 Total Marketing

Domestic Streaming

The rate 7,5% of the segment's revenues were set for the whole forecasted period based on the Netflix Inc. presence in the US market.

International Streaming

The international streaming marketing expense is expected to decrease over the whole forecasted period and reach the level of 7,5% of the segment's revenue in 2026.

4.5.3 Technology and development

Technology and development expense cannot be directly linked with the specific segment. Therefore, the forecast is based on the correlation with the total revenue and is expressed as percentage of the total revenue. There is no targets set for this item. For this reason the forecast is historically based. The item is assumed to account for 9% of the revenue for the entire forecasted period.

4.5.4 General and Administrative

Similarly as the previous item general and administrative expense cannot be assigned to particular segment. Due to this it is also forecasted to as proportion of the total revenue and it is expected to account 6,5% constantly over the forecasted period.

4.5.5 Corporate tax

Corporate tax is expected to remain stable during the whole forecasted period. The rate of 30% is used.

4.6 SUMMARY OF THE COST FORECAST

Operating Costs Forecast											
Domestic segment	**2016E**	**2017E**	**2018E**	**2019E**	**2020E**	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**
As % of Segment Revenue											
Costs of revenue	58,20%	54,00%	54,50%	53,50%	53,50%	52,50%	52,50%	52,50%	52,50%	52,50%	52,50%
Marketing	7,50%	7,50%	7,50%	7,50%	7,50%	7,50%	7,50%	7,50%	7,50%	7,50%	7,50%
Margin	34,30%	38,50%	38,00%	39,00%	39%	40%	40%	40%	40%	40%	40%
International Segment											
As % of Segment Revenue											
Costs of revenue	87,80%	78,00%	73,00%	74,00%	70,00%	69,25%	64,49%	61,73%	57,96%	54,19%	52,50%
Marketing	20,0%	20,0%	16,0%	12,0%	10%	9,8%	9,5%	9,3%	9,0%	8,8%	7,5%
Margin	-7,80%	2,00%	11,00%	14,00%	20%	21%	26%	29%	33%	37%	40%
Domestic DVD											
As % of Segment Revenue											
Costs of revenue	49%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Margin	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Technology and development	**9%**	**9%**	**9%**	**9%**	**9%**	**9%**	**9%**	**9%**	**9%**	**9%**	**9%**
General and Administrative	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**	**6,50%**

Table 4-9 Operating Costs Forecast. Source: Author's composition

The table above summarizes and presents the forecast of the separate operating costs items.

4.6.1 Balance sheet forecast

For the balance sheet forecasting mainly a % of operating revenue approach is used. This methodology was chosen as it explains balance sheet items better and it is less volatile in historical perspective. For some specific items aggregated value drivers are used. The balance sheet forecast is directly linked with the revenue forecast as it gives the key inputs for forecasting individual balance sheet items.

4.6.1.1 Current Assets

Cash and equivalents

The forecasted cash flow shows the average increase in cash and cash equivalents of 15% on average within the next 10 years and 13% in the terminal period. The forecasted cash flow statement is provided in the appendices.

Short-term investments

According to the Netflix Inc. annual report the company has no intent to gain profits from the short-term investments and it is not the operating item. (Netflix Inc., 2015, s. 51) The common size analysis reveals that this item was relatively volatile and it stands a little proportion of the total assets. Therefore, it was assumed to be stable during the whole forecasted period as it has no significant impact in valuation.

Current content library

Current content library is one key items, which accounted for 33% of the total assets on average. Netflix Inc. The item includes the streaming proportion of the total streaming content, which is available to be used within 1-year period, while the rest content is included to non-current content assets. The significant correlation between the content library assets and the total revenue has been observed. Therefore, the forecast is based on this correlation and this item is forecasted to remain in line with the revenue growth. Additions to this item are expected accounted for 103% in the last financial period. However, the long term company's objective is to keep this rate at 60% in in 2021. Therefore, it is assumed additions to new content item will decline during the forecasted period reaching 60% in 2021.

Other current assets

The other current assets item includes such elements as prepaid content and had been stable during the historical 5-year period. Therefore, the item is expected to remain stable in the future as well.

4.6.1.2 Non-Current Assets

Non-current content library

In order to forecast non-current content library firstly additions to content library as % of the total revenue were calculated on historical basis, which showed quite stable development and accounts for 70% on average. However, in last financial data shows a significant increase in this ratio and in can be explained by Netflix Inc. policy to increase to provide a more customer oriented content. Moreover, the company it their annual report describes their plans to increase contents within the next few years. For this reason, we forecast additions to the content library should reach 80% in the high growth period, lowering down to 75% in the transition period and decreasing towards the stable-growth term. Similarly, the amortization on streaming content as % of the revenue were calculated, which averaged to 50% during the past 5years and we expect it to remain stable for the whole forecasted period. It can be argued, that such calculation methodology is relatively objective as it directly correlates with revenues and the company's business operating business model is not expected to change in the future.

Property and equipment

Netflix Inc. property and equipment item on the balance sheet includes: IT assets, buildings, furniture etc. The item has relatively low weight on total assets and as of 30-09-2016 it accounts for 1,55%.The forecast of this item is based on growth in capital expenditure of 15% as well as considering 8,5% annual depreciation. The internal and external analysis have not indicated some future prospects which may have an influence on the capital expenditure. Therefore, this rate is used for the whole forecasting period.

Other non-current assets

Other non-current assets contributes very little portion (average of 2%) to the total assets and this item had been more or less stable during the past periods. Therefore, this item is forecasted to remain stable for the whole forecast.

4.6.1.3 Current Liabilities

Current content liabilities

The similar methodology as forecasting the content assets were used to forecast the liabilities as well. The only difference is that the stable 25% ratio to the revenue was applied. The reason behind that is historically based as the additions to current content liability were quite stable over the time.

Accounts payable

Accounts payable are forecasted by using payables turnover ratio relative to the revenue. The analysis showed the ratio value of 8, which was historically stable. Consequently, that led to the assumption that this ratio will remain in the future as well.

Accrued expenses

The item was stable in the historical perspective and has no significant influence for the valuation results; therefore, it assumed to remain stable for the whole forecasted period.

Deferred revenue

As well as accrued expenses deferred revenue item has no significance on valuation. Therefore, it assumed to remain unchanged.

4.6.1.4 Non-Current Liabilities

Non-current content liabilities

The forecasting non-current liability similar methodology as calculating non-current assets is used. Firstly, the ratio of additions to non-current content liability as % of the revenue was calculated, which averaged to 46% of the revenue. Consequently, additions leads to proportional increase in the liability item. Based on assumption that operating business model remains the same, the stable ratio was used for forecasting the entire period.

Long-term debt

The financial data of Netflix Inc. shows that the company recently issued long term bonds (maturing in 2027) valuing at 2 billion USD. Such capital increase should fulfill the capital requirements for the next period. Moreover, the company in their financial statements describes the capital collecting

policy, which includes the capital raise through issuance of shares. For this reason, it might be assumed that the long term debt should remain at the same level over the forecasted period.

Other non-current liabilities

The item has no significant impact on the valuation and it is fairly stable over the historical perspective. Moreover, it is quite impossible to relate this item with revenue or to base it on some assumptions. Therefore, other non-current liabilities forecasted to remain at the base year level.

Equity

There are no objective assumptions for the changes in equity in the nearest future. The decision to increase equity is extensively based the company's decision. For this reason, the equity of Netflix Inc. is expected to remain stable during the forecasting horizon.

4.6.1.5 Summary of balance sheet forecast

The basic assumptions of the balance sheet forecast are as following:

- The operating business model remains the same.
- Additions to content assets and liabilities correlates with the revenue at stable rate over the entire forecasting horizon.
- The company has obtained enough capital and there will not be capital increase through external sources.
- Capital expenditure will correlate with the revenue the correlation rate will remain stable over the forecast.
- There will be no changes in depreciation method and amortization policy.
- The items having no objective correlation with revenue will remain at stable with the base year value.

Additions to the content assets and consequently, the content assets is the only items, where the forecasted to have different ratios in concern to the company's growth stage.

4.6.2   Cost of Capital- WACC
In this section weighted average cost of capital is calculated using the same methodology as used in the section of forecasting – using peer companies and industry estimates.

4.6.2.1 Cost of equity

Pursuing the recommendations from the previous part of the thesis CAPM model is applied for calculating the cost of equity for Netflix Inc.

4.6.2.1.1 Beta

Different sources provide different historical beta value of Netflix. For example, yahoo.com – 0,67, Thomson one banker – 0,79. Moreover, Thomson one Banker provides a data about the beta values of the key Netflix Inc. competitors, which presents unlevered beta median of 0,66 (See appendix no 14. In contrast, according damodaran.com, e-commerce unlevered industry beta is 1,17 (Thomson One Banker, 2016) (damodaran.com, 2016). As previously presented framework suggests historical beta value may not appropriate measure for valuing such companies as Netflix Inc. Consequently, industry beta of 1,17 is used as the most representative and levered back to Netflix Inc. capital structure. It leads to beta value of 1,29.

For obtaining a higher objectivity, the most traditional and widely used method for estimating a beta value of a company is by doing a regression. S&P 500 index and the NASDAQ Composite index were used as a benchmark market portfolios. Beta value found is equal to 1,1 when regressing Netflix against S&P 500 and it is equal to 1,14 when NASDAQ Composite index is used as a benchmark. The beta values estimated are higher than 1 what means that investors owning shares of Netflix should expect higher returns than if owning a market portfolio. R^2 values obtained from both regressions are approximately 10% what indicates that roughly 10% of variability in Netflix's stock returns can be attributed to the market variability if we assume that the chosen indices are good indicators of the overall market.

In order to verify the accuracy of obtained beta values it is worth inspecting the confidence intervals. The confidence interval of beta value when S&P 500 index is used is [0,913169022; 1,28736485] and it is [0,977943568; 1,303781765] when NASDAQ is used. It can therefore be verified that the beta values obtained are correct since they fall into both of the 5% confidence intervals. P-values estimated are smaller than 5% in both regressions, therefore the hypothesis used when estimating beta which is that it is equal to 1 is rejected leading to the conclusion that the beta values are not equal to 1. P-values once again confirm the results calculated.

As it might be seen the beta value calculated using regression analysis is lower than the one calculated using industry unlevered industry beta. However, the beta of value 1,29 as partly industry based measure and in our view is more objective.

10-year zero coupon US Treasury bond yield is used as risk free rate, which is 2,5% at the moment. (The Wall Street Journal, 2016).

As I was discussed in the theoretical part of the thesis 7% market risk premium is quite representative figure for high-growth companies as Netflix Inc.

Taking into account all above mentioned, the calculation gives the result of 11,18%. Table below presents the calculation.

Risk free rate	2,50%
Equity risk premium	7%
BETA	1,29
Cost of Equity	11,53%

Table 4-10 Cost of equity. Netflix Inc.

4.6.2.2 Cost of debt

On 27th October 2016 Netflix Inc. has issued corporate bonds valuing 2 billion USD leading to 3,4 billion USD total debt estimate. Please refer to appendix no 14 where the total debt overview is presented. Netflix has managed to borrow capital at 4,375% rate which is 1,5% lower than previous rate of 5,875%. This leads to 7,83% weighted average costs of debt. That quite well represents the company's borrowing capacity and current market situation. However, the cost of capital is expected to appreciate in the longer time horizon. Consequently, 8,25% cost of debt is assumed to be objective measure.

4.6.2.3 Capital Structure

The recent issue of the long term bonds has effected the capital structure. In spite of this, change is quite minor and had no significant impact on the debt weight in capital structure. It moved from 6,1% to 5,7%. It can be argued that such capital structure would remain quite stable in the nearest future. However, as the company will move the stable-growth period the changes a likely to occur. It might

be assumed that the company will obtain higher amounts of debt in the long run. Consequently, rising the weight of debt and that leads to changes in WACC value.

4.6.2.4 WACC Calculation

WACC calculation is presented in the table below.

Equity Value	56197	Cost of equity	
Equity Weight	94,30%	Risk free rate	2,50%
		Equity Risk Premium	7%
Debt	3400	Beta	1,29
Debt Weight	5,70%	**Cost of equity**	**11,53%**
		WACC	**11,18%**
		Cost of Debt	
		Wtd Avg Interest Rate	8,25%
		Cost of Debt (after tax)	**5,36%**

4.7 VALUATION

The methodology formulated in the descriptive part of the thesis suggests to use discounted cash flow model. For this reason the valuation of Netflix Inc. was performed using this methodology. The forecasted financial statements provided a necessary inputs for the calculations. The table below represents the input data and the outcome of the DCF valuation.

Valuation - DCF -Netflix Inc.	
WACC	**11,09%**
Discount factor	0,90
PV of FCFF	-1.278.448,72
PV of FCFF in forecasting period	20.399.336,52
PV of FCFF in terminal period	44.903.839,74
Estimated market value (a.k.a enterprise value)	65.303.176,27
Net interest-bearing debt	3.373.966,00
Estimated market value of equity	61.929.210,27
Shares outstanding	438.389,00
Estimate price per share	**141,27**
Terminal growth rate	**2,00%**

Table 4-11 Valuation DCF. Netflix Inc. Source: Author's composition

The forecasted period chosen for the valuation was uncommonly long and therefore, the value of the forecasted period accounts for 33%. Subsequently, the terminal value accounts for 67%. In order to contra-bias the optimistic forecast the long term growth rate represents relatively conservative expectations and is estimated as 2% for the valuation.

The current share price as of 20-12-2016 is 125,12 USD per share and the valuation results how the fair price should be 141,27 USD per share. Therefore, it might be argued that the stock is slightly undervalued at the moment.

Netflix is operating in the very competitive and sensitive industry. Due to this the forecasted data might differ significantly from the actual one. Consequently, as it as significant impact for the valuation the assessed fair value of the company might differ as well.

4.7.1 Sensitivity analysis

Valuating a company is a task involving a lot of assumptions and uncertainties. Sensitivity analysis is used in order to evaluate how the estimated share price varies when different values of inputs in the chosen model are used. In this analysis the chosen variables are WACC and the terminal growth rate with the chosen valuation model being DCF method. Many other variables for the sensitivity analysis could be chosen such as a tax rate, the risk free rate or the beta value. WACC incorporates many of those available inputs and therefore it has been chosen to be the variable in this analysis. The terminal growth rate is a very important figure as well since it has a lot of impact on the terminal value of the firm.

Sensitivity analysis Netflix Inc.					
WACC	Terminal Growth Rate				
	1,00%	2,00%	3,00%	4,00%	4,50%
5,00%	479,04	612,39	885,1	1703,21	3339,44
6,00%	358,93	433,35	557,37	805,41	1053,45
7,00%	281,87	327,04	394,78	507,69	598,01
8,00%	227,64	257,03	298,18	359,91	404
9,00%	187,62	207,72	234,52	272,05	297,07
10,00%	157,03	171,3	189,65	214,12	229,69
11,00%	133,02	143,45	156,49	173,25	183,56
11,09%	131,02	141,15	153,79	170	180,12
12,00%	113,76	121,56	131,1	143,02	150,17
13,00%	98,04	103,99	111,13	119,85	124,98
14,00%	85,03	89,63	95,08	101,62	105,4
15,00%	74,12	77,74	81,06	86,95	89,8

Figure 4-14 Author's own composition

As it can be seen from the table above changes in WACC and the growth rate can influence the share price to become significantly higher or significantly lower than the actual estimated share price. Change in the terminal growth rate influences the share price to vary much less than when the WACC is used as a variable. With a terminal growth rate of 1% the estimated share price becomes $131.02 while it becomes $180.12 when the terminal growth rate is set to be equal to 4.5%. With a terminal growth rate being constant at 2% and WACC changing to 15% the share price estimate becomes $77.74 while it becomes $612.39 if the WACC is set to be 5%. If it is assumed that the estimated WACC of 11.09% is correct then with the terminal growth rate varying between 1% and 4.5% the conclusion stays the same which is that the shares of Netflix Inc. are underpriced. The share price of the company was $126.57 on the 30th of October, 2016. Sensitivity analysis supports the conclusion obtained from the initial share price calculation by using the DCF method that the shares of Netflix

Inc. are undervalued. The charts bellow provides a visual presentation of the share price sensitivity to WACC and terminal growth rate.
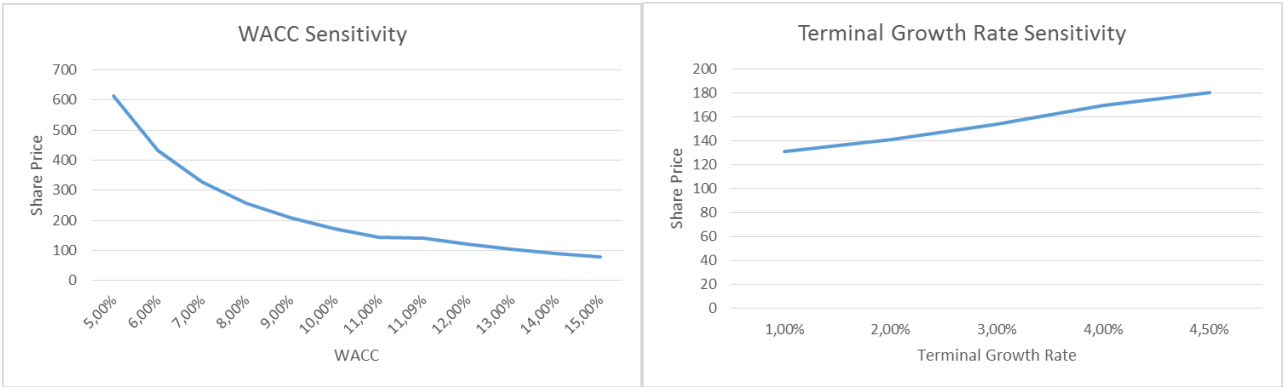
Figure 4-15 WACC & Terminal Growth Rate sensitivity. Source: Authors Composition

4.7.2 Scenario analysis

Scenario analysis is performed in order to show how the enterprise value would change if the company will not manage to perform as expected. Previously perform valuation represents the base case scenario and further two scenarios are created. Both scenarios are long-term oriented and are based on changes in revenues and the contribution margins.

Worst Case Scenario

- For the worst case scenario the following assumptions are used:
- The company will not reach targeted 38% international segment contribution margin by 2026 and it will be only 30%.
- The contribution margin of the domestic segment in 2020 will account for 38%.and not targeted 40%
- The revenue average revenue growth rate through the forecasted period will be 13% and not 15%.

Based on the following assumptions and all the rest remaining unchanged the value of the Netflix Inc. stock is 67,18 USD.

Best Case Scenario

- For the best case scenario the following assumptions are used:
- The company will exceed targeted 38% international segment contribution margin by 2026 and will be 45%
- The contribution margin of the domestic segment in 2020 will account for 43%.and not targeted 40%
- The revenue average revenue growth rate through the forecasted period will be 19% and not 15%.

If the company will managed to optimize the operations and generated higher than expected revenue, the share price should be valued at 202,23 USD.

4.7.3 Valuation summary

Current share price		$	125,12
	Share price		Investment return
Base	$	141,27	12,91%
Worst case	$	67,18	-46,31%
Best case	$	202,23	61,63%

Table 4-12 Netflix Inc. Share investment potential. Source: Authors' composition

The table above summarizes the key findings of the Netflix Inc. valuation and it can be argued that currently the company is slightly undervalued. In addition, as it can be seen the upside potential is higher than the downside. However, as discussed previously the market competitiveness and volatile international industry environment has a significant impact on the accuracy of the valuation. Moreover, the company's value depends heavily on the management's ability to optimize the operating costs, what also may have a substantial impact on the share price performance.

5 THESIS CONCLUSION

The objective of the thesis was to identify the main challenges when valuing high-growth companies. The theoretical framework developed in the descriptive chapter suggested to use advanced forecasting methodology followed by the discounted cash flow model. In order to prove the framework applicability and objectivity the valuation of the case company - Netflix Inc. was performed.

Particular challenges were identified in regards to the valuation of high-growth companies through the case study.

- Market size and market share. In case of high-growth companies it is extremely difficult forecast the overall market size and the company's market share in it over the longer time horizon.

- Assessment of the stable-growth time. The uncertainty lies on the estimated time period of how long the company will remain at high-growth stage of the lifecycle.

- A growth pace leading to the stable growth. Identification of the growth rate deceleration carries the uncertainty risk due to uncertain high-growth time prospective.

- Management's capabilities. Uncertainty in regards to management's decisions and capability to reach the estimated levels of performance.

- Operating expenses and margins. In relation with management capabilities, the operating expenses and margins are difficult to estimate objectively.

- Changes in the business model and operations. Objectively assume, that the high-growth company will continue to operate following a current operating business model towards the stable-growth period and in perpetuity.

All in all, the valuation process of the high-growth company is not that much different from the valuation of a well-established company. However the uncertainty in the formulation of the key assumptions is much higher; consequently, leading to less objective valuation outcomes.

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1. Top ten fastest growing companies in the world.

Rank	Company	EPS 3 YR. Growth	REV 3YR. Growth	Total 3 YR. Return
1	Natural Health Trends	187%	106%	211%
2	Vipshop Holdings	192%	105%	56%
3	Facebook	203%	53%	66%
4	INSYS Therapeutics	119%	147%	41%
5	Douglas Dynamics	141%	46%	31%
6	Ligand Pharmaceuticals	273%	31%	47%
7	Skechers U.S.A.	155%	27%	55%
8	Abiomed	127%	27%	72%
9	Ambarella	59%	38%	45%
10	LendingTree	40%	41%	73%
Average		150%	62%	70%

Source Fortune Magazine

2. Pro forma Income Statement

Annual Income Statement Netflix Inc. (values in 000's)

Period Ending:	2011	2012	2013	2014	2015
Total Revenue	$ 3.204.577	$ 3.609.282	$ 4.374.562	$ 5.504.656	$ 6.779.511
Domestic Streaming	$ 2.029.123	$ 2.184.868	$ 2.751.375	$ 3.421.434	$ 4.180.339
International Streaming	$ 82.850	$ 287.542	$ 712.390	$ 1.308.061	$ 1.953.435
Domestic DVD	$ 1.092.604	$ 1.136.872	$ 910.797	$ 765.161	$ 645.737
Total Cost of Revenues	$ 2.039.901	$ 2.625.866	$ 3.117.203	$ 3.752.760	$ 4.591.476
Domestic Streaming	$ 1.932.419	$ 1.570.600	$ 1.863.376	$ 2.201.761	$ 2.847.193
International Streaming	$ 107.482	$ 483.295	$ 782.304	$ 1.154.117	$ 1.780.375
Domestic DVD		$ 598.163	$ 471.523	$ 396.882	$ 323.908
Total Marketing	$ 402.638	$ 465.400	$ 469.942	$ 607.186	$ 824.092
Domestic Streaming	$ 324.121	$ 245.259	$ 265.232	$ 203.453	$ 317.646
International Streaming	$ 78.517	$ 193.390	$ 204.418	$ 313.733	$ 506.446
Technology and development	$ 259.033	$ 329.008	$ 378.769	$ 472.321	$ 650.788
General and Administrative	$ 126.937	$ 139.016	$ 180.301	$ 269.741	$ 407.329
Total operating cost	$ 2.828.509	$ 3.559.290	$ 4.146.215	$ 5.102.008	$ 6.473.685
EBITDA	$ 419.815	$ 95.461	$ 276.721	$ 456.676	$ 368.109
Depreciation	$ 43.747	$ 45.469	$ 48.374	$ 54.028	$ 62.283
EBIT	$ 376.068	$ 49.992	$ 228.347	$ 402.648	$ 305.826
Corporation tax, reported	$ -133.396	$ -13.328	$ -58.671	$ -82.570	$ -19.244
Tax shield, net financial expenses	$ -6.139	$ -8.532	$ -19.642	$ -12.592	$ -22.235
NOPAT	$ 236.533	$ 28.132	$ 150.034	$ 307.486	$ 264.347
Non-Operating items					
Interest and other income (Expense)	$ 3.479	$ 474	$ -28.131	$ -3.060	$ -31.225
Interest Expense	$ -20.025	$ -19.986	$ -29.142	$ -50.219	$ -132.716
EBT	$ 359.522	$ 30.480	$ 171.074	$ 349.369	$ 141.885
Income Tax	$ 133.396	$ 13.328	$ 58.671	$ 82.570	$ 19.244
Minority Interest	$ -	$ -	$ -	$ -	$ -
Equity Earnings/Loss Unconsolidated Subsidiary	$ -	$ -	$ -	$ -	$ -
Net Income-Cont. Operations	$ 226.126	$ 17.152	$ 112.403	$ 266.799	$ 122.641
Net Income	$ 226.126	$ 17.152	$ 112.403	$ 266.799	$ 122.641
Net Income Applicable to Common Shareholders	$ 226.126	$ 17.152	$ 112.403	$ 266.799	$ 122.641
Effective Tax rate	37,10%	43,73%	34,30%	23,63%	13,56%

3. Pro forma Balance Sheet

Annual Balance Sheet Netflix Inc. (values in 000's) reformulated					
Period ending:	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
Operating current assets					
Cash and Cash equivalents	$ 508.053	$ 290.291	$ 604.965	$ 1.113.608	$ 1.809.330
Current content assets	$ 919.709	$ 1.368.162	$ 1.706.421	$ 2.166.134	$ 2.905.998
Other current assets	$ 113.337	$ 124.551	$ 151.937	$ 152.423	$ 215.127
Total operating currents assets	**$1.541.099**	**$ 1.783.004**	**$ 2.463.323**	**$ 3.432.165**	**$ 4.930.455**
Operating current liabilities					
Accounts Payable	$ 86.992	$ 86.468	$ 108.435	$ 201.581	$ 253.491
Current Content liabilities	$ 935.036	$ 1.366.847	$ 1.775.983	$ 2.117.241	$ 2.789.023
Other current liabilities	$ 203.027	$ 222.611	$ 269.785	$ 344.332	$ 487.110
Total operating current liabilities	**$1.225.055**	**$ 1.675.926**	**$ 2.154.203**	**$ 2.663.154**	**$ 3.529.624**
NOWC	$ 316.044	$ 107.078	$ 309.120	$ 769.011	$ 1.400.831
Operating non-current assets					
Fixed assets	$ 136.353	$ 131.681	$ 133.605	$ 149.875	$ 173.412
Non-Current content	$1.046.934	$ 1.506.008	$ 2.091.071	$ 2.773.326	$ 4.312.817
Other non-current assets	$ 55.052	$ 89.410	$ 129.124	$ 192.246	$ 284.802
Total operating non-current assets	**$1.238.339**	**$ 1.727.099**	**$ 2.353.800**	**$ 3.115.447**	**$ 4.771.031**
Operating non-current liabilities					
Non-Current content liabilities	$ 739.628	$ 1.076.622	$ 1.345.590	$ 1.575.832	$ 2.026.360
Other liabilities	$ 61.703	$ 70.669	$ 79.209	$ 59.957	$ 52.099
Total operating non-current liabilities	**$ 801.331**	**$ 1.147.291**	**$ 1.424.799**	**$ 1.635.789**	**$ 2.078.459**
NONCA	**$ 437.008**	**$ 579.808**	**$ 929.001**	**$ 1.479.658**	**$ 2.692.572**
Invested capital	$ 753.052	$ 686.886	$ 1.238.121	$ 2.248.669	$ 4.093.403
Period ending:	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015
Financial assets					
Short-Term Investments	$ 289.758	$ 457.787	$ 595.440	$ 494.888	$ 501.385
Total financial assets	**$ 289.758**	**$ 457.787**	**$ 595.440**	**$ 494.888**	**$ 501.385**
Financial liabilities					
Long-Term Debt	$ 400.000	$ 400.000	$ 500.000	$ 885.849	$ 2.371.362
Total financial liabilities	**$ 400.000**	**$ 400.000**	**$ 500.000**	**$ 885.849**	**$ 2.371.362**
NET FINANCIAL ASSETS	**$ -110.242**	**$ 57.787**	**$ 95.440**	**$ -390.961**	**$-1.869.977**
EQUITY INCL. MINORITIES	**$ 642.810**	**$ 744.673**	**$ 1.333.561**	**$ 1.857.708**	**$ 2.223.426**
Invested Capital	$ -753.052	$ -686.886	$-1.238.121	$-2.248.669	$-4.093.403
Verification diff. Invested Capital	0	0	0	0	0

4. Pro forma Cash Flow Statement

Annual Cash Flow Statement Netflix Inc. (values in 000's)				
Period Ending:	**12-31-2011**	**12-31-2012**	**12-31-2013**	**12-31-2014**
Cash flows from operating activities:				
Net income	$ 226.126	$ 17.152	$ 226.126	$ 266.799
Adjustments to reconcile net income to net cash				
provided by (used in) operating activities:				
Additions to streaming content assets	$ -2.320.732	$ -2.515.506	$ -3.049.758	$ -3.773.459
Change in streaming content liabilities	$ 1.463.955	$ 762.089	$ 673.785	$ 593.125
Amortization of streaming content liabilities	$ 699.128	$ 1.591.218	$ 2.121.981	$ 2.656.279
Amortization of DVD content assets	$ 96.744	$ 65.396	$ 71.325	$ 79.380
Depreciation and amortization of property, equipment and intangibles	$ 43.747	$ 45.469	$ 48.374	$ 54.028
Stock-based compensation expense	$ 61.582	$ 73.948	$ 73.100	$ 124.725
Excess tax benefits from stock-based compensation	$ -45.784	$ -4.543	$ -81.663	$ -80.471
Other non-cash items	$ -4.050	$ -8.392	$ 5.332	$ 31.628
Loss on establishment of debt			$ 25.129	
Deferred taxes	$ -18.597	$ -30.071	$ -22.044	$ -30.063
Changes in operating assets and liabilities:				
Other current assets & liabilities	$ 1.436	$ -5.432	$ 62.234	$ -9.198
Net cash provided by (used in) operating activities	**$ 317.712**	**$ 21.586**	**$ 97.831**	**$ 16.483**
Cash flows from investing activities:				
Acquisition of DVD content assets	**$ -85.154**	$ -48.275	$ -65.927	$ -74.790
Purchases of property and equipment	$ -49.682	$ -40.278	$ -54.143	$ -69.726
Change in other assets	$ 3.674	$ 8.816	$ 5.939	$ 1.334
Purchases of short-term investments	$ -233.750	$ -477.321	$ -550.264	$ -426.934
Proceeds from sale of short-term investments	$ 50.993	$ 282.953	$ 347.502	$ 385.300
Proceeds from maturities of short-term investments	$ 38.105	$ 29.365	$ 60.925	$ 141.950
Net cash provided by (used in) investing activities	**$ -265.814**	**$ -244.740**	**$ -255.968**	**$ -42.866**
Cash flows from financing activities:				
Proceeds from issuance of common stock	$ 19.614	$ 4.124	$ 124.557	$ 60.544
Proceeds from public offering	$ 199.947	$ -464		
Proceeds from issuance of debt	$ 198.060	$ -295	$ 490.586	$ 400.000
Redemption of debt			$ -219.362	
Repurchase of common stock	$ -19.966			
Issuance costs				$ -7.080
Excess tax benefits from stock-based compensation	$ 45.784	$ 4.543	$ 81.663	$ 89.341
Other financing activities	$ -2.083	$ -2.319	$ -1.180	$ -1.093
Net cash provided by financing activities	**$ 261.656**	**$ 5.589**	**$ 476.264**	**$ 541.712**
Effect of exchange rate changes on cash and cash equivalents		$ -197	$ -3.453	$ -6.686
Net increase (decrease) in cash and cash equivalents	$ 313.554	$ -217.762	$ 314.674	$ 508.643
Cash and cash equivalents, beginning of period	$ 194.499	$ 508.053	$ 290.291	$ 604.965
Cash and cash equivalents, end of period	**$ 508.053**	**$ 290.291**	**$ 604.965**	**$ 1.113.608**

5. Common size Balance Sheet

Annual Balance Sheet Netflix Inc. commonsize as % of total assets					
Period ending:	**12/31/2011**	**12/31/2012**	**12/31/2013**	**12/31/2014**	**12/31/2015**
Total Assets	100%	100%	100%	100%	100%
Operating current assets					
Cash and Cash equivalents	17%	7,3%	11,2%	15,8%	15,7%
Current content assets	30%	34,5%	31,5%	30,8%	31,9%
Other current assets	4%	3,1%	2,8%	2,2%	2,1%
Total operating currents assets	50%	44,9%	45,5%	48,7%	49,8%
Operating current liabilities					
Accounts Payable	3%	2,2%	2,0%	2,9%	2,3%
Current Content liabilities	30%	34,4%	32,8%	30,1%	30,8%
Other current liabilities	7%	5,6%	5,0%	4,9%	5,4%
Total operating current liabilities	40%	42,2%	39,8%	37,8%	38,6%
NOWC	10%	3%	6%	11%	11%
Operating non-current assets					
Fixed assets	4%	3%	2%	2%	2%
Non-Current content	34%	38%	39%	39%	52%
Other non-current assets	2%	2%	2%	3%	3%
Total operating non-current assets	**40%**	**44%**	**43%**	**44%**	**56%**
Operating non-current liabilities					
Non-Current content liabilities	24%	27%	25%	22%	25%
Other liabilities	2%	2%	1%	1%	1%
Total operating non-current liabilities	**26%**	**29%**	**26%**	**23%**	**26%**
	0%	0%	0%	0%	0%
	0%	0%	0%	0%	0%
NONCA	**14%**	**15%**	**17%**	**21%**	**30%**
Invested capital	25%	17%	23%	32%	41%
Period ending:	**12/31/2011**	**12/31/2012**	**12/31/2013**	**12/31/2014**	**12/31/2015**
Financial assets					
Short-Term Investments	9%	12%	11%	7%	5%
Total financial assets	**9%**	**12%**	**11%**	**7%**	**5%**
Financial liabilities					
Long-Term Debt	13%	10%	9%	13%	23%
Total financial liabilities	**13%**	**10%**	**9%**	**13%**	**23%**
NET FINANCIAL ASSETS	**-4%**	**1%**	**2%**	**-6%**	**-19%**
EQUITY INCL. MINORITIES	21%	19%	25%	26%	23%
Invested Capital	-25%	-17%	-23%	-32%	-41%
Verification diff. Invested Capital	0%	0%	0%	0%	0%

6. Common size Income Statement

Annual Income Statement Netflix Inc. commonsize as % of revenue					
Period Ending: 31Dec	**2011**	**2012**	**2013**	**2014**	**2015**
Total Revenue	**100%**	**100%**	**100%**	**100%**	**100%**
Domestic Streaming	56,22%	60,53%	62,89%	62,16%	61,66%
International Streaming	2,30%	7,97%	16,28%	23,76%	28,81%
Domestic DVD	30,27%	31,50%	20,82%	13,90%	9,52%
Total Cost of Revenues	**56,52%**	**72,75%**	**71,26%**	**68,17%**	**67,73%**
Domestic Streaming	53,54%	43,52%	42,60%	40,00%	42,00%
International Streaming	2,98%	13,39%	17,88%	20,97%	26,26%
Domestic DVD	0,00%	16,57%	10,78%	7,21%	4,78%
Total Marketing	**11,16%**	**12,89%**	**10,74%**	**11,03%**	**12,16%**
Domestic Streaming	8,98%	6,80%	6,06%	3,70%	4,69%
International Streaming	2,18%	5,36%	4,67%	5,70%	7,47%
Technology and development	7,18%	9,12%	8,66%	8,58%	9,60%
General and Administrative	3,52%	3,85%	4,12%	4,90%	6,01%
Total operating cost	**78,37%**	**98,61%**	**94,78%**	**92,69%**	**95,49%**
EBITDA	**11,63%**	**2,64%**	**6,33%**	**8,30%**	**5,43%**
Depreciation	1,21%	1,26%	1,11%	0,98%	0,92%
EBIT	**10,42%**	**1,39%**	**5,22%**	**7,31%**	**4,51%**
Corporation tax, reported	-3,70%	-0,37%	-1,34%	-1,50%	-0,28%
Tax shield, net financial expenses	-0,17%	-0,24%	-0,45%	-0,23%	-0,33%
NOPAT	**6,55%**	**0,78%**	**3,43%**	**5,59%**	**3,90%**
Non-Operating items					
Interest and other income (Expense)	0,10%	0,01%	-0,64%	-0,06%	-0,46%
Interest Expense	-0,55%	-0,55%	-0,67%	-0,91%	-1,96%
EBT	**9,96%**	**0,84%**	**3,91%**	**6,35%**	**2,09%**
Income Tax	3,70%	0,37%	1,34%	1,50%	0,28%
Minority Interest	0,00%	0,00%	0,00%	0,00%	0,00%
Equity Earnings/Loss Unconsolidated Subsidiary	0,00%	0,00%	0,00%	0,00%	0,00%
Net Income-Cont. Operations	**6,27%**	**0,48%**	**2,57%**	**4,85%**	**1,81%**
Net Income	**6,27%**	**0,48%**	**2,57%**	**4,85%**	**1,81%**
Net Income Applicable to Common Shareholders	**6,27%**	**0,48%**	**2,57%**	**4,85%**	**1,81%**
Effective Tax rate	**37,10%**	**43,73%**	**34,30%**	**23,63%**	**13,56%**

7. Forecasted Income Statement

Annual Income Statement Netflix Inc. (values in 000's)					
Period Ending:	**2016E**	**2017E**	**2018E**	**2019E**	**2020E**
Total Revenue	**$ 8.823.128**	**$ 9.717.482**	**$ 10.731.843**	**$ 12.638.104**	**$ 14.896.065**
Domestic Streaming	$ 5.070.845	$ 5.500.000	$ 5.300.858	$ 5.673.781	$ 6.043.003
International Streaming	$ 3.210.429	$ 3.746.688	$ 5.028.992	$ 6.621.077	$ 8.559.978
Domestic DVD	$ 541.854	$ 470.793	$ 401.992	$ 343.246	$ 293.084
Total Cost of Revenues	**$ 6.048.167**	**$ 6.210.314**	**$ 6.634.044**	**$ 8.078.324**	**$ 9.555.317**
Domestic Streaming	$ 2.876.630	$ 3.052.500	$ 2.862.464	$ 3.007.104	$ 3.202.791
International Streaming	$ 2.905.201	$ 2.922.417	$ 3.570.585	$ 4.899.597	$ 6.205.984
Domestic DVD	$ 266.336	$ 235.397	$ 200.996	$ 171.623	$ 146.542
Total Marketing	**$ 1.047.753**	**$ 1.079.338**	**$ 1.329.287**	**$ 1.248.432**	**$ 1.339.438**
Domestic Streaming	$ 405.668	$ 330.000	$ 424.069	$ 453.902	$ 483.440
International Streaming	$ 642.086	$ 749.338	$ 905.219	$ 794.529	$ 855.998
Technology and development	$ 794.082	$ 874.573	$ 965.866	$ 1.137.429	$ 1.340.646
General and Administrative	$ 573.503	$ 631.636	$ 697.570	$ 821.477	$ 968.244
Total operating cost	**$ 8.463.505**	**$ 8.795.861**	**$ 9.626.767**	**$ 11.285.662**	**$ 13.203.646**
EBITDA	**$ 418.038**	**$ 999.934**	**$ 1.216.412**	**$ 1.505.711**	**$ 1.930.436**
Depreciation	$ 58.415	$ 78.314	$ 111.336	$ 153.269	$ 238.016
EBIT	**$ 359.623**	**$ 921.621**	**$ 1.105.076**	**$ 1.352.442**	**$ 1.692.419**
Corporation tax, reported	$ -73.904	$ -201.179	$ -254.694	$ -326.044	$ -424.650
Tax shield, net financial expenses	$ 29.377	$ -46.155	$ -44.634	$ -41.774	$ -38.387
NOPAT	**$ 315.095**	**$ 674.287**	**$ 805.749**	**$ 984.624**	**$ 1.229.382**
Non-Operating items					
Interest and other income (Expense)	$ 44.116	$ 48.587	$ 53.659	$ 63.191	$ 74.480
Interest Expense	$ -142.037	$ -202.438	$ -202.438	$ -202.438	$ -202.438
EBT	**$ 457.544**	**$ 670.595**	**$ 848.979**	**$ 1.086.814**	**$ 1.415.501**
Income Tax	$ 73.904	$ 201.179	$ 254.694	$ 326.044	$ 424.650
Minority Interest	$ -	$ -	$ -	$ -	$ -
Equity Earnings/Loss Unconsolidated Subsidiary	$ -	$ -	$ -	$ -	$ -
Net Income-Cont. Operations	**$ 383.640**	**$ 469.417**	**$ 594.285**	**$ 760.770**	**$ 990.851**
Net Income	**$ 383.640**	**$ 469.417**	**$ 594.285**	**$ 760.770**	**$ 990.851**
Net Income Applicable to Common Shareholders	**$ 383.640**	**$ 469.417**	**$ 594.285**	**$ 760.770**	**$ 990.851**
Effective Tax rate	**30,00%**	**30,00%**	**30,00%**	**30,00%**	**30,00%**

Annual Income Statement Netflix Inc. (values in 000's)						
Period Ending:	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**
Total Revenue	**$ 17.535.671**	**$ 20.581.576**	**$ 24.051.751**	**$ 27.956.447**	**$ 32.297.541**	**$ 37.068.306**
Domestic Streaming	$ 6.406.758	$ 6.763.485	$ 7.111.830	$ 7.450.645	$ 7.778.980	$ 8.096.074
International Streaming	$ 10.878.660	$ 13.604.409	$ 16.757.466	$ 20.350.011	$ 24.385.537	$ 28.858.648
Domestic DVD	$ 250.253	$ 213.682	$ 182.454	$ 155.791	$ 133.024	$ 113.584
Total Cost of Revenues	**$ 11.017.310**	**$ 12.453.114**	**$ 14.215.874**	**$ 16.055.603**	**$ 17.933.499**	**$ 19.994.714**
Domestic Streaming	$ 3.331.514	$ 3.517.012	$ 3.698.152	$ 3.874.336	$ 4.045.070	$ 4.209.958
International Streaming	$ 7.560.669	$ 8.829.261	$ 10.426.495	$ 12.103.372	$ 13.821.918	$ 15.727.963
Domestic DVD	$ 125.127	$ 106.841	$ 91.227	$ 77.895	$ 66.512	$ 56.792
Total Marketing	**$ 1.546.013**	**$ 1.779.080**	**$ 2.040.252**	**$ 2.330.687**	**$ 2.651.000**	**$ 2.812.085**
Domestic Streaming	$ 512.541	$ 541.079	$ 568.946	$ 596.052	$ 622.318	$ 647.686
International Streaming	$ 1.033.473	$ 1.238.001	$ 1.471.306	$ 1.734.635	$ 2.028.682	$ 2.164.399
Technology and development	$ 1.578.210	$ 1.852.342	$ 2.164.658	$ 2.516.080	$ 2.906.779	$ 3.336.148
General and Administrative	$ 1.139.819	$ 1.337.802	$ 1.563.364	$ 1.817.169	$ 2.099.340	$ 2.409.440
Total operating cost	**$ 15.281.352**	**$ 17.422.339**	**$ 19.984.148**	**$ 22.719.539**	**$ 25.590.618**	**$ 28.552.385**
EBITDA	**$ 2.652.716**	**$ 3.744.880**	**$ 4.928.498**	**$ 6.502.423**	**$ 8.567.231**	**$ 11.250.573**
Depreciation	$ 398.397	$ 585.643	$ 860.895	$ 1.265.516	$ 1.860.308	$ 2.734.653
EBIT	**$ 2.254.319**	**$ 3.159.237**	**$ 4.067.603**	**$ 5.236.908**	**$ 6.706.923**	**$ 8.515.920**
Corporation tax, reported	$ -589.261	$ -856.167	$ -1.123.472	$ -1.477.890	$ -1.920.653	$ -2.463.498
Tax shield, net financial expenses	$ -34.428	$ -29.859	$ -24.654	$ -9.313	$ 5.469	$ 19.927
NOPAT	**$ 1.630.631**	**$ 2.273.211**	**$ 2.919.477**	**$ 3.749.705**	**$ 4.791.739**	**$ 6.072.349**
Non-Operating items						
Interest and other income (Expense)	$ 87.678	$ 102.908	$ 120.259	$ 139.782	$ 161.488	$ 185.342
Interest Expense	$ -202.438	$ -202.438	$ -202.438	$ -170.826	$ -143.258	$ -118.917
EBT	**$ 1.964.203**	**$ 2.853.891**	**$ 3.744.906**	**$ 4.926.300**	**$ 6.402.178**	**$ 8.211.662**
Income Tax	$ 589.261	$ 856.167	$ 1.123.472	$ 1.477.890	$ 1.920.653	$ 2.463.498
Minority Interest	$ -	$ -	$ -	$ -	$ -	$ -
Equity Earnings/Loss Unconsolidated Subsidiary	$ -	$ -	$ -	$ -	$ -	$ -
Net Income-Cont. Operations	**$ 1.374.942**	**$ 1.997.724**	**$ 2.621.434**	**$ 3.448.410**	**$ 4.481.524**	**$ 5.748.163**
Net Income	**$ 1.374.942**	**$ 1.997.724**	**$ 2.621.434**	**$ 3.448.410**	**$ 4.481.524**	**$ 5.748.163**
Net Income Applicable to Common Shareholders	**$ 1.374.942**	**$ 1.997.724**	**$ 2.621.434**	**$ 3.448.410**	**$ 4.481.524**	**$ 5.748.163**
Effective Tax rate	**30,00%**	**30,00%**	**30,00%**	**30,00%**	**30,00%**	**30,00%**

Annual Income Statement Netflix Inc. commonsize as % of revenue					
Period Ending: 31Dec	**2016E**	**2017E**	**2018E**	**2019E**	**2020E**
Total Revenue	**100%**	**100%**	**100%**	**100%**	**100%**
Domestic Streaming	221,42%	56,60%	49,39%	44,89%	40,57%
International Streaming	140,18%	38,56%	46,86%	52,39%	57,46%
Domestic DVD	23,66%	4,84%	3,75%	2,72%	1,97%
Total Cost of Revenues	**264,09%**	**63,91%**	**61,82%**	**63,92%**	**64,15%**
Domestic Streaming	125,61%	31,41%	26,67%	23,79%	21,50%
International Streaming	126,85%	30,07%	33,27%	38,77%	41,66%
Domestic DVD	11,63%	2,42%	1,87%	1,36%	0,98%
Total Marketing	**45,75%**	**11,11%**	**12,39%**	**9,88%**	**8,99%**
Domestic Streaming	17,71%	3,40%	3,95%	3,59%	3,25%
International Streaming	28,04%	7,71%	8,43%	6,29%	5,75%
Technology and development	34,67%	9,00%	9,00%	9,00%	9,00%
General and Administrative	25,04%	6,50%	6,50%	6,50%	6,50%
Total operating cost	**369,56%**	**90,52%**	**89,70%**	**89,30%**	**88,64%**
EBITDA	**18,25%**	**10,29%**	**11,33%**	**11,91%**	**12,96%**
Depreciation	**2,55%**	**0,81%**	**1,04%**	**1,21%**	**1,60%**
EBIT	**15,70%**	**9,48%**	**10,30%**	**10,70%**	**11,36%**
Corporation tax, reported	-3,23%	-2,07%	-2,37%	-2,58%	-2,85%
Tax shield, net financial expenses	1,28%	-0,47%	-0,42%	-0,33%	-0,26%
NOPAT	**13,76%**	**6,94%**	**7,51%**	**7,79%**	**8,25%**
Non-Operating items					
Interest and other income (Expense)	1,93%	0,50%	0,50%	0,50%	0,50%
Interest Expense	-6,20%	-2,08%	-1,89%	-1,60%	-1,36%
EBT	**19,98%**	**6,90%**	**7,91%**	**8,60%**	**9,50%**
Income Tax	3,23%	2,07%	2,37%	2,58%	2,85%
Minority Interest	0,00%	0,00%	0,00%	0,00%	0,00%
Equity Earnings/Loss Unconsolidated	0,00%	0,00%	0,00%	0,00%	0,00%
Net Income-Cont. Operations	**16,75%**	**4,83%**	**5,54%**	**6,02%**	**6,65%**
Net Income	**16,75%**	**4,83%**	**5,54%**	**6,02%**	**6,65%**
Net Income Applicable to Comm	**16,75%**	**4,83%**	**5,54%**	**6,02%**	**6,65%**

Annual Income Statement Netflix Inc. commonsize as % of revenue						
Period Ending: 31Dec	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**
Total Revenue	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Domestic Streaming	36,54%	32,86%	29,57%	26,65%	24,09%	21,84%
International Streaming	62,04%	66,10%	69,67%	72,79%	75,50%	77,85%
Domestic DVD	1,43%	1,04%	0,76%	0,56%	0,41%	0,31%
Total Cost of Revenues	**62,83%**	**60,51%**	**59,11%**	**57,43%**	**55,53%**	**53,94%**
Domestic Streaming	19,00%	17,09%	15,38%	13,86%	12,52%	11,36%
International Streaming	43,12%	42,90%	43,35%	43,29%	42,80%	42,43%
Domestic DVD	0,71%	0,52%	0,38%	0,28%	0,21%	0,15%
Total Marketing	**8,82%**	**8,64%**	**8,48%**	**8,34%**	**8,21%**	**7,59%**
Domestic Streaming	2,92%	2,63%	2,37%	2,13%	1,93%	1,75%
International Streaming	5,89%	6,02%	6,12%	6,20%	6,28%	5,84%
Technology and development	9,00%	9,00%	9,00%	9,00%	9,00%	9,00%
General and Administrative	6,50%	6,50%	6,50%	6,50%	6,50%	6,50%
Total operating cost	**87,14%**	**84,65%**	**83,09%**	**81,27%**	**79,23%**	**77,03%**
EBITDA	**15,13%**	**18,20%**	**20,49%**	**23,26%**	**26,53%**	**30,35%**
Depreciation	**2,27%**	**2,85%**	**3,58%**	**4,53%**	**5,76%**	**7,38%**
EBIT	**12,86%**	**15,35%**	**16,91%**	**18,73%**	**20,77%**	**22,97%**
Corporation tax, reported	-3,36%	-4,16%	-4,67%	-5,29%	-5,95%	-6,65%
Tax shield, net financial expenses	-0,20%	-0,15%	-0,10%	-0,03%	0,02%	0,05%
NOPAT	**9,30%**	**11,04%**	**12,14%**	**13,41%**	**14,84%**	**16,38%**
Non-Operating items						
Interest and other income (Expense)	0,50%	0,50%	0,50%	0,50%	0,50%	0,50%
Interest Expense	-1,15%	-0,98%	-0,84%	-0,61%	-0,44%	-0,32%
EBT	**11,20%**	**13,87%**	**15,57%**	**17,62%**	**19,82%**	**22,15%**
Income Tax	3,36%	4,16%	4,67%	5,29%	5,95%	6,65%
Minority Interest	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Equity Earnings/Loss Unconsolidated	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Net Income-Cont. Operations	**7,84%**	**9,71%**	**10,90%**	**12,33%**	**13,88%**	**15,51%**
Net Income	**7,84%**	**9,71%**	**10,90%**	**12,33%**	**13,88%**	**15,51%**
Net Income Applicable to Comm	**7,84%**	**9,71%**	**10,90%**	**12,33%**	**13,88%**	**15,51%**

8. Forecasted Cash Flow Statement

Annual Cash Flow Statement Netflix Inc. (values in 000's)						
Period Ending:	2016E	2017E	2018E	2019E	2020E	2021E
Cash flows from operating activities:						
Net income	$ 383.640	$ 469.417	$ 594.285	$ 760.770	$ 990.851	$ 1.374.942
Adjustments to reconcile net income to net cash						
provided by (used in) operating activities:						
Additions to streaming content assets	$ -8.857.087	$ -10.008.874	$ -11.232.742	$ -14.180.621	$ -17.237.791	$ -19.436.816
Change in streaming content liabilities	$ 2.232.167	$ 2.860.351	$ 3.613.701	$ 4.868.149	$ 6.603.958	$ 8.195.547
Amortization of streaming content liabilities	$ 4.610.653	$ 5.653.082	$ 7.141.973	$ 9.621.213	$ 13.051.796	$ 16.197.347
Amortization of DVD content assets						
Depreciation and amortization of property, equipment and intang	$ 58.415	$ 78.314	$ 111.336	$ 153.269	$ 238.016	$ 398.397
Stock-based compensation expense						
Excess tax benefits from stock-based compensation						
Other non-cash items						
Loss on establishment of debt						
Deferred taxes						
Changes in operating assets and liabilities:						
Other current assets & liabilities	$ 94.643	$ 77.791	$ 109.492	$ 116.286	$ 171.967	$ 221.875
Accounts payable	$ 16.707					
Accrued expenses	$ 72.288					
Deferred revenue	$ 80.485					
Other non-current assets and liabilities	$ -43.604					
Net cash provided by (used in) operating activities	$ -1.477.569	$ -869.920	$ 338.045	$ 1.339.066	$ 3.818.797	$ 6.951.291
Cash flows from investing activities:						
Acquisition of DVD content assets						
Purchases of property and equipment	$ -74.245	$ -158.717	$ -277.598	$ -485.520	$ -849.178	$ -1.485.218
Change in other assets						
Purchases of short-term investments						
Proceeds from sale of short-term investments						
Proceeds from maturities of short-term investments						
Net cash provided by (used in) investing activities	$ -74.245	$ -158.717	$ -277.598	$ -485.520	$ -849.178	$ -1.485.218
Cash flows from financing activities:						
Proceeds from issuance of common stock						
Proceeds from public offering						
Proceeds from issuance of debt	$ 2.000.000					
Redemption of debt						
Repurchase of common stock						
Issuance costs						
Excess tax benefits from stock-based compensation						
Other financing activities						
Net cash provided by financing activities	$ 2.000.000	$ -	$ -	$ -	$ -	$ -
Effect of exchange rate changes on cash and cash equivalents						
Net increase (decrease) in cash and cash equivalents	$ 448.187	$ -1.028.637	$ 60.447	$ 853.545	$ 2.969.619	$ 5.466.073
Cash and cash equivalents, beginning of period	$ 1.809.330	$ 1.605.244	$ 1.390.925	$ 969.158	$ -	$ 2.257.517
Cash and cash equivalents, end of period	$ 2.257.517	$ 576.607	$ 1.451.373	$ 1.822.704	$ 2.969.619	$ 7.723.590

Annual Cash Flow Statement Netflix Inc. (values in 000's)										
Period Ending:		**2022E**		**2023E**		**2024E**		**2025E**		**2026E**
Cash flows from operating activities:										
Net income	$	1.997.724	$	2.621.434	$	3.448.410	$	4.481.524	$	5.748.163
Adjustments to reconcile net income to net cash										
provided by (used in) operating activities:										
Additions to streaming content assets	$	-22.741.075	$	-26.607.058	$	-31.130.258	$	-36.422.402	$	-42.614.210
Change in streaming content liabilities	$	10.654.210	$	13.850.474	$	18.005.616	$	23.407.300	$	30.429.491
Amortization of streaming content liabilities	$	19.274.843	$	22.937.063	$	27.295.105	$	32.481.175	$	38.652.598
Amortization of DVD content assets										
Depreciation and amortization of property, equipment and intang	$	585.643	$	860.895	$	1.265.516	$	1.860.308	$	2.734.653
Stock-based compensation expense										
Excess tax benefits from stock-based compensation										
Other non-cash items										
Loss on establishment of debt										
Deferred taxes										
Changes in operating assets and liabilities:										
Other current assets & liabilities	$	306.187	$	422.538	$	583.103	$	804.682	$	1.110.461
Accounts payable										
Accrued expenses										
Deferred revenue										
Other non-current assets and liabilities										
Net cash provided by (used in) operating activities	**$**	**10.077.532**	**$**	**14.085.347**	**$**	**19.467.491**	**$**	**26.612.588**	**$**	**36.061.156**
Cash flows from investing activities:										
Acquisition of DVD content assets										
Purchases of property and equipment	$	-2.599.131	$	-4.548.480	$	-7.959.840	$	-13.929.719	$	-24.377.008
Change in other assets										
Purchases of short-term investments										
Proceeds from sale of short-term investments										
Proceeds from maturities of short-term investments										
Net cash provided by (used in) investing activities	**$**	**-2.599.131**	**$**	**-4.548.480**	**$**	**-7.959.840**	**$**	**-13.929.719**		**######**
Cash flows from financing activities:										
Proceeds from issuance of common stock										
Proceeds from public offering										
Proceeds from issuance of debt										
Redemption of debt										
Repurchase of common stock										
Issuance costs										
Excess tax benefits from stock-based compensation										
Other financing activities										
Net cash provided by financing activities	**$**	**-**	**$**	**-**	**$**	**-**	**$**	**-**	**$**	**-**
Effect of exchange rate changes on cash and cash equivalents										
Net increase (decrease) in cash and cash equivalents	$	7.478.401	$	9.536.867	$	11.507.652	$	12.682.869	$	11.684.147
Cash and cash equivalents, beginning of period	$	576.607	$	1.451.373	$	1.822.704	$	2.969.619	$	7.723.590
Cash and cash equivalents, end of period	**$**	**8.055.008**	**$**	**10.988.240**	**$**	**13.330.355**	**$**	**15.652.488**	**$**	**19.407.737**

9. US Market Growth Sloping Pace

US Market growth slowing pace						Average
Year	2012	2013	2014	2015	2016	
Growth of Subscribers (Deutsche Bank Report, 2016)	33,33%	21,43%	14,71%	15,38%	8,89%	
Pace of Growth		-35,71%	-31,37%	4,62%	-42,22%	-26,17%

10. International market growth

Discount Rate (DR), No.			International Market								
		USA	Europe	Australia	Russia	South Korea	India	Latin America	Japan	Other Asian Countries*	SUM:
	Population	**318.000.000**	740.000.000	23.000.000	14.422.341	50.800.000	1.252.000.000	10.761.990.000	126.173.594	2.164.815.000	
First DR	Popularity of US made media in % (Deutche Bank Report)	**-**	49%	76%	65%	38%	6%	10,00%	20%	21,33%	
	No. of people (Popularity of US made media)		362.600.000	17.480.000	9.374.522	19.304.000	75.120.000	1.076.199.000	25.234.719	461.827.200	
	Current Subscribers	**49.000.000**	42000000								
Third DR	Subscribers of all population (%) (Annual Report 2015)	**15,41%**									
	GDP, USD Dollars (Billions) (http://www.tradingeconomics.com/european-union/gdp)	**55116**	0,00	56311	9093	27222	1582	0,00	34477	0,00	
Second DR	Compared GDP to US %		0,00%	102,17%	16,50%	49,39%	2,87%	0,00%	62,55%	0,00%	
	Possible amount of Subscribers		-	17.858.993	1.546.602	9.534.318	2.156.177	-	15.785.206	-	**46.881.296**
Third DR	Discounted by Netflix popularity in US (15,41%)		-	2.752.071	238.331	1.469.238	332.267	-	2.432.500	-	**7.224.408**

11. Growth in different segments

Growth in different segments									
Period Ending:	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017E**	**2018E**	**2019E**
Number of Subscribers									
Domestic Streaming	21	28	34	39	45	49,00	53,03	57,06	61,08
Grow th of subscribers		33,33%	21,43%	14,71%	15,38%	8,89%	8,22%	7,61%	7,04%
International Streaming	2	6	11	18	30	42	57,54	77,23	101,68
Grow th of subscribers		200,00%	83,33%	63,64%	66,67%	40,00%	37,00%	34,23%	31,66%
DVD rental segment g		3,89%	-24,82%	-19,03%	-18,49%	-14,61%	-14,61%	-14,61%	-14,61%

Growth in different segments	Transition Period						Stable grow th		
Period Ending:	**2020E**	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**
Number of Subscribers									
Domestic Streaming	65,05	68,97	72,81	76,56	80,20	83,74	87,15	90,44	93,59
Grow th of subscribers	6,51%	6,02%	5,57%	5,15%	4,76%	4,41%	4,08%	3,77%	3,49%
International Streaming	131,46	167,07	208,93	257,35	312,53	374,50	443,20	518,40	599,76
Grow th of subscribers	29,28%	27,09%	25,06%	23,18%	21,44%	19,83%	18,34%	16,97%	15,69%
DVD rental segment g	-14,61%	-14,61%	-14,61%	-14,61%	-14,61%	-14,61%	-14,61%	-14,61%	-14,61%

12. Historical WACC calculation

Historical WACC,				
Average Equity Value	25421218		Cost of equity	
Equity Weight	98,44%		Risk free rate	1,69%
			Equity Risk Premium	5,33%
Average Debt	403060		Historical Beta based on S&P correlation	0,96
Debt Weight	1,56%		**Cost of equity**	**6,81%**
			WACC	**6,77%**
			Cost of Debt	
			Wtd Avg Interest Rate	6,00%
			Cost of Debt (after tax)	**4,26%**
! Note all calculations are based on 5-year historical data. Beta -based on regresion analysis with S&P500. Risk free rate - average 5-years. Equity risk premium avarege return on S&P market portfolio.				

13. Beta values of the key Netflix Inc. competitors.

Company	Historical BETA	D/E	Unlevered beta
AMAZON.COM, INC.	1,4	1,08	0,85
TIME WARNER INC.	1,1	1,01	0,69
COMCAST CORPORATION	1,07	1,13	0,64
APPLE INC.	1,24	0,68	0,88
VERIZON COMMUNICATIONS INC.	0,45	5,21	0,11
AT&T INC.	0,4	1,03	0,25
BEST BUY CO., INC.	1,58	0,32	1,32
ECHOSTAR CORPORATION	0,67	0,57	0,50
WAL-MART STORES, INC.	0,09	0,64	0,06
CBS Corporation	1,66	1,67	0,83
Average	**0,97**	**1,33**	**0,61**
Median	**1,09**	**1,02**	**0,66**

Source: Thomson One Banker

14. Regression analysis

SUMMARY OUTPUT		NFLX/S&P500						
Regression Statistics								
Multiple R	0,288652109							
R Square	0,08332004							
Adjusted R Square	0,082693893							
Standard Error	0,035012134							
Observations	1466							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0,163121036	0,163121036	133,0677491	1,58E-29			
Residual	1464	1,794643699	0,00122585					
Total	1465	1,957764735						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	0,001321119	0,000915215	1,443506505	0,149091782	-0,000474154	0,003116391	-0,000474154	0,00311639
Beta	1,100266936	0,095380953	11,53549952	1,58E-29	0,913169022	1,28736485	0,913169022	1,28736485
SUMMARY OUTPUT		NFLX/NASDAQ						
Regression Statistics								
Multiple R	0,954440055							
R Square	0,910955818							
Adjusted R Square	0,910894996							
Standard Error	0,003231574							
Observations	1466							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0,156408789	0,156408789	14977,27635	0			
Residual	1464	0,015288659	1,04E-05					
Total	1465	0,171697447						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	7,93E-05	8,45E-05	0,938875718	0,347949427	-8,64E-05	0,000245011	-8,64E-05	0,00024501
Beta	1,077391766	0,008803538	122,3816831	0	1,060122873	1,09466066	1,060122873	1,09466066

15. DEBT OVERVIEW NETFLIX INC.

Bonds

Currency		Issues		Outstanding		Issued	
U.S. Dollar		6		3.400.000.000		3.400.000.000	

Description	Maturity Date	Amount Outstanding (USD)	Issued Amount (USD)	Cpn Class	Country	Issue Date	Debt Type	Mod Dur	OA Dur	OAS	Yield	Yld Type	Yld Event	Yld Date	Price
NFLX 5 21/02/01	01-Feb-2021	500.000.000	500.000.000	Fixed Coupon	United States	04-Feb-2014	Sr Note	3.573,000	3.572,000	157,0	3.252,000	MAT	MAT	01-Feb-2021	108,000
NFLX 6 22/02/15	15-Feb-2022	700.000.000	700.000.000	Fixed Coupon	United States	08-Feb-2016	Sr Note	4.401,000	4.395,000	183,0	3.707,000	MAT	MAT	15-Feb-2022	108,000
NFLX 6 24/03/01	01-Mar-2024	400.000.000	400.000.000	Fixed Coupon	United States	19-Feb-2015	Sr Note	5.768,000	5.749,000	224,0	4.390,000	MAT	MAT	01-Mar-2024	108,000
NFLX 6 25/02/15	15-Feb-2025	800.000.000	800.000.000	Fixed Coupon	United States	08-Feb-2016	Sr Note	6.398,000	6.381,000	234,0	4.569,000	MAT	MAT	18-Feb-2025	109,000
NFLX 4 26/11/15	15-Nov-2026	1.000.000.000	1.000.000.000	Fixed Coupon	United States	27-Oct-2016	Sr Note	7.831,000	7.800,000	226,0	4.597,000	MAT	MAT	16-Nov-2026	98,000
NFLX 4 26/11/15	15-Nov-2026	1.000.000.000	1.000.000.000	Fixed Coupon	Eurobond	27-Oct-2016	Sr Note	7.647,000	7.794,000	230,0	4.645,000	MAT	MAT	16-Nov-2026	98,000
Total					6			3.400.000.000			3.400.000.000				

Source; Thomson One Banker

16. List of Asian countries, population

2	Vietnam	91,812,000	17	Laos	6,802,000
3	Thailand	68,387,000	18	Kyrgyzstan	5,943,000
4	Myanmar	52,280,000	19	Singapore	5,541,000
5	Malaysia	31,032,000	20	Turkmenistan	4,902,000
6	Taiw an[6]	23,455,000	21	Palestine[8]	4,683,000
7	Syria	23,270,000	22	Lebanon	4,288,000
8	Sri Lanka	20,869,000	23	Oman	4,181,000
9	Kazakhstan	17,541,000	24	Kuw ait	4,161,000
10	Cambodia	15,040,000	25	Georgia	3,730,000
11	Azerbaijan	9,651,000	26	Mongolia	3,029,000
12	United Arab Emirates	8,933,000	27	Armenia	3,005,000
13	Tajikistan	8,451,000	28	Qatar	2,113,000
14	Israel	8,372,000	29	Bahrain	1,781,000
15	Hong Kong (China)[7]	7,299,000	30	Timor-Leste	1,245,000
16	Jordan	6,837,000			

Source. Global data