Proceedings of the 7th International Conference on Economic Management and Green Development
DOI: 10.54254/2754-1169/30/20231451

Analyzing the Debt's Effects on Netflix's Liquidity and Costs

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Abstract: Netflix has issued substantial sums of debt in 2018 and 2019 in order to expand its content library and deal with the intense rivalry that exists in the streaming media sector. The objective of this paper was to investigate the ways in which Netflix's liquidity and costs of financing are impacted by the use of long-term debt financing. The annual reports that Netflix produced from 2017 through 2022 were scrutinized in great detail. According to the findings of this research, Netflix did not experience any liquidity issues in 2018 and 2019 as a result of its long-term debt financing. Therefore, organizations that provide streaming media may utilize long-term debt financing in order to make short-term investments if they managed the due dates of their loan in an appropriate manner. Meanwhile, based on the findings of this study, Netflix was able to reduce the costs associated with debt by issuing debt mostly in euros and using fixed interest rates. When interest rates are forecasted to rise, it may be beneficial for businesses to cut their debt costs by taking on debt denominated primarily in euros and offering fixed interest rates.

Keywords: Netflix, long-term debt, liquidity, costs of debt

1. Introduction

1.1. Research Background

The American film and television industry is thriving from 2018 to 2019. With people's pursuit of spiritual entertainment and the progress of network platforms, the streaming media industry also saw a promising development. According to the Theater and Home Entertainment Market Report 2019, issued by the Motion Picture Association of America, the number of online video content subscribers continued to grow in 2018. [1]. In the streaming media industry of America, Netflix is a brilliant streaming media platform company. Memberships could watch various videos and films on Netflix platforms by paying the fees to acquire a specific ID. Also, Netflix provides DVD-by-mail services. As one of the world's biggest streaming media companies, Netflix changed the way traditional information was transmitted. Not only does Netflix deliver streaming entertainment in the United States and Canada, it also commits to expanding the international market. By 2018, Netflix's market had expanded to Europe, the Middle East, Africa, and Latin America.

As the streaming media market's share of the overall market grew in 2018 and 2019, more and more competitors entered the market. On 2019.11.12, Disney + entered the streaming media market with exclusive Disney IP. In order to survive the fierce market competition, Netflix chose to

DOI: 10.54254/2754-1169/30/20231451

massively acquire streaming entertainment and build its own content library using debt financing to attract memberships and thus occupy the markets.

Netflix has always been a hot topic in academic research. Lots of researchers focused on Netflix's international impact and its success factors. For example, Ramon Lobato focused on the area of how, as a global streaming platform, video-on-demand services and internet distribution changed global TV culture [2]. Jenner, however, are more focused on the influences of Netflix on the original content as a video-on-demand platform; they studied Netflix in the contemporary media environment and in the US market to see how Netflix influences the original content [3]. In the field of business, some of the research has focused on the influence of Netflix on its users. For example, Wayne focused on the effect of Netflix on worldwide teenagers [4]. On the other hand, Savitz focused on the evolution of Netflix's business model, and Bradford focused on specific model analysis such as the competition-based business model [5, 6]. Moreover, researchers like Flint and Maidenberg are more interested in the core valuation index of Netflix [7]. They investigated the trend and growth of future subscription numbers [7].

1.2. Research Gap

Even though there are many research studies about the impact and profitability of Netflix, only a few have examined Netflix's financing policy. Between 2018 and 2019, Netflix financed $8.44 billion through issuing notes within just 2 years to acquire large amounts of streaming content assets, implementing a strategy of building a content library [8, 9]. There have been few studies on the impact of debt financing policy on Netflix. Whether Netflix would suffer liquidity problems in the short run due to the debt financing wasn't investigated during the past research. In order to rectify what effect debt financing would have on Netflix in the short run, this research focused on examining the impacts of long-term debt issued between 2018 and 2019 rather than the business model and profitability forecast as in previous research. The overall goal of this work was to identify the impact of long-term debt on the company's liquidity and financing costs. This research will make contributions to the fields of applicable financing policies that streaming media companies can choose to expand their businesses. The key contribution of this work is the solutions it provides to deal with the emergency cash crisis. Moreover, this work will contribute to the cost control methods of the financing policy.

1.3. Fill the Gap

This research will be divided into three sections. The paper will first document Netflix's status throughout the years Netflix deliberately built streaming content utilizing debt funding from 2018 to 2020. Afterwards it will look into the influence of debt financing on liquidity, debt costs, and financed money flows. Following a discussion of the impact of financing policies on Netflix, this paper will provide numerous recommendations for future funding difficulties.

2. Case Description

Netflix was established in 1997. In Netflix' early business, it generated revenue through DVD-by-mail services. Nowadays, Netflix generates revenue mainly by providing online TV platforms, and members can watch millions of original, marvelous serialized TV shows and films through subscription.

In Netflix's current business model, the key components of revenue are the membership price and the number of memberships. In 2021, Netflix drove up the membership price in Korea to increase revenue and improve the company's valuation. However, price changes are subject to many external, uncontrollable factors that constrain the raising of prices. Some regions are very sensitive to changing prices, so raising the membership price could result in losing large numbers of consumers. The market

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competition structure could also limit the price hikes. On 2019.11.12, Disney + entered the streaming media market with nearly half of Netflix's most popular set subscription price [10]. Apple TV also charged a much lower price than Netflix's plan. Netflix's charging much higher prices than competitors would result in customers transferring to other platforms.

As raising the price is difficult, Netflix chooses to boost revenue and maintain the revenue stream by catching the memberships' time and attention and sparing no efforts to maximize the number of memberships. Also, Netflix uses delivering unique, high-quality streaming contents on the platform to enhance membership loyalty. In 2018, 2019 and 2020, Netflix borrowed $9.514 billion to expand its library and attract new members [8, 9]. Not only did Netflix acquire licensed content, it also invested large amounts of money in producing original content. Even though Netflix also borrowed money before 2018, this is the first time it's borrowed over $3 billion in just 2018's one year to implement strategy (the specific borrowing amounts are summarized in Table 1) [8, 9].

Table 1: Money borrowed by Netflix from 2018 till 2020.

Years	2018	2019	2020	Total amounts in 2018, 2019& 2020
Amounts (in millions) $	1900	1346	574	
	1260	900	500	
	800	1234		
		1000		
Total Amounts (in millions) $	3960	4480	1074	9514

Many investors were dissatisfied, when Netflix released new notes in 2018 and 2019. Many investors asserted that Netflix's strategy is to build the platform to attract customers using outsiders' free cash; whether the growth rate of revenue will meet expectations can be a question [11]. Some investors also stated that the quality of films can be subjective and uncertain, which may lead to the number of memberships fluctuating significantly. If consumers do not have an appetite for the exclusive contents, then the money is wasted on the non-value-added items. Moreover, many investors stated that huge amounts of debt could generate liquidity problems, and Netflix's actions are like gambling with others' money. Even though there are many negative voices on Netflix pointing out the bad sides of debt, there isn't enough research demonstrating specific disadvantages of debt to support this claim. This research takes typical two-year borrowing in 2018 and 2019 as research subjectivity, using annual report analysis to demonstrate the long-term debt effect on liquidity and cost of financing.

3. Analysis on Problems

3.1. Debts' Effect on Netflix's Liquidity

From 2018 to 2019, Netflix issued long-term notes to borrow a total of $3.96 billion and $4.48 billion, respectively [8, 9]. As the principal amounts are large and material and there is relevance between debt and liquidity, this research determines to analyze the effect of these two years of long-term borrowing on Netflix's liquidity from 2018 until 2019. Netflix's liquidity problem is relevant, given the free cash flow and interest and principal due at the end of the year. If Netflix didn't have enough free cash flows to cover the money needed in its daily operating activities, then it could have liquidity problems. Furthermore, if Netflix could not repay the interest and principal amounts by the due date, it could also have liquidity problems.

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In 2018 and 2019, Netflix had $3,019,599,000 and $3,274,386,000 in free cash flow in demand, respectively [8, 9]. According to Netflix's annual report, the cash is mostly used for daily operations, the purchase of DVD content assets, and the reconciliation of other assets. This means that in 2019 and 2020, Netflix will need $3019.599 million and $3274.385 million, respectively, to stay in business and add more content to its library as part of a strategy change [8, 9].Its annual report states that in 2018 and 2019, financing activities provided net cash of $4048.527 million and $4505.662 million, respectively [8, 9].By using net cash from financing activities as the numerator and free cash flow needed as the denominator to calculate the ratio, this research assesses Netflix's liquidity. It finds that the ratios for 2018 and 2019 are both larger than 1, which means Netflix's financing amounts could support Netflix's survival in 2018 and 2019 [8, 9].

After looking closely at the net cash provided by financing activities, it was found that most of the net cash provided by financing activities comes from current-year financing activities. This means that most of the financing amounts come from loans that were taken out in 2018 and 2019. In 2018, Netflix issued three rounds of long-term notes, and in 2019, four rounds. Netflix raised a total of $3.96 million and $4.48 million, which was 97.18% and 99.43% of the net cash provided from financing activities in those years [8, 9]. The percentage shows that Netflix's total funding in 2018 and 2019 came from debt financing, which allowed it to stay in business and execute its strategy. Netflix earned $41,725 and $84,000 in interest income in 2018 and 2019, respectively [8, 9]. In addition, because the loan was financed for two years through the issuance of long-term notes, the principal due dates were ten years in the future, preventing any liquidity concerns. By issuing long-term notes in 2018 and 2019, Netflix was able to successfully transfer the debt burden into the future and resolve its cash flow crisis (Table 2).

Table 2: Analysis of Debt's Effects on Netflix's Liquidity.

Year	2018	2019
Non-GAAP reconciliation of free cash flows: (Amounts in thousands except ratios) ($)		
Net cash provided by (used in) operating activities	(2,680,479)	(2,887,322)
Purchases of property and equipment	(173,946)	(253,035)
Change in other assets	(165,174)	(134,029)
Free cash flow needed	(3,019,599)	(3,274,386)
Net cash provided by financing activities	4,048,527	4,505,662
Money borrowed in current year	3,960,000	4,480,000
Money borrowed in current year in portion of Net cash provided by financing activities	97.81%	99.43%
Money needed to repay in current year	311,339	538,384
Interest and other income	41,725	84,000
Interest Expense	420,493	626,023
Net cash provided by financing activities/ Free cash flow needed	1.341	1.376

3.2. Debts' Effects on Netflix's Costs of Financing

In 2018, Netflix obtained debt denominated in euros with a €1100 million principal amount and 4.625% annual interest rates [8, 9]. Compared with other debt raised in 2018, the interest rate on this debt is the lowest. Also in 2019, Netflix obtained two rounds of debt denominated in euros with €1200 million and €1100 million in principal amounts and interest rates of 3.875% and 3.625%, respectively,

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which are the lowest costs of the debt obtained in both 2018 and 2019 [8, 9]. Through obtaining debts denominated in other foreign currencies, Netflix lowers the cost of debt. The lower cost of debt helped Netflix save on financing costs, which added value to the company.

Netflix uses the long-term notes to lock in the relative lower interest rates and to hedge the risk and uncertainty of an increasing interest rate. According to Netflix’s 2019 annual report, the interest on the ten-year notes issued in 2018 and 2019 is all paid at fixed rates. The fixed rates indicated that no matter how much interest rates increase, Netflix doesn’t have to pay for the additional costs when interest rates increase, and Netflix could use the economic costs for 10 years without having to spare money for managing the costs. The long-time fixed costs facilitate Netflix's ability to manage funds with more certainty and clarity, which adds value to Netflix.

According to Netflix’s 2019 annual report, Netflix had incurred a net of $114 million in flotation costs to obtain the aggregate long-term borrowings of $14,759 million [9]. The flotation costs mainly flow to third parties such as underwriters, lawyers, and accountants. Modigliani and Miller had proposed the pie theory of the capital structure. The value of the company is the sum of discounted cash flows that flow to the debt holders and equity holders. The flotation costs led to the cash flow going to outsiders, which caused the third parties to cut off a piece of the company’s value pie.

4. Suggestions

4.1. Suggestion on Financing Policy

By looking at how debt affects Netflix's cash flow, this paper suggests that Netflix could use long-term notes to solve a short-term cash problem the next time it needs to make an emergency appeal. In the meantime, Netflix should take care of the dates when long-term notes come due so that they don't all come due at the same time in the future. The main reasons for this recommendation are Netflix’s past success in long-term debt financing, the beneficial effects of the debt on Netflix, and the advantages of long-term debt over stock.

The first analysis shows that large amounts of long-term debt did not generate a liquidity problem for Netflix in 2018 and 2019, but rather met the company's daily cash demands. Netflix's long-term notes helped it change its strategy, add more content to its library, and get more members in the years that followed. This led to a 35.08% increase in revenue in 2018, a 27.62% increase in 2019, and a 24.01% increase in 2020 (the revenues are summarized in Table 3) [8–10]. The cash proceeds from long-term note funding satisfy the emergency cash requirement. Long-term debt due dates have no effect on short-term liquidity because the repayment pressure is in the future. Avoiding a liquidity crisis is possible by using the interest income from the other investments to offset the long-term interest costs.

Table 3: Netflix’s Revenue.

Year	2018	2019	2020
Total Revenue (in thousands) $	15,794,341	20,156,447	24,996,056
Growth Rate		27.62%	24.01%

When Netflix issues long-term debt, it could achieve the same funding purpose as it does with equity funding, but with the added advantage of debt. The first advantage of long-term debt is the tax benefit. When the term of debt is very long, the interest paid every period is like the stock dividend. However, the dividend payment will inevitably result in double taxation, which means when shareholders receive the dividend, they have to pay individual tax. This indicates that when shareholders plan to acquire profit from the company, the same revenues are taxed at the corporate level and then taxed at the individual level. However, the interest expenses could build the tax shield, which would help the company save on tax expenses. The second advantage of long-term debt is that the long-term debt funding will not change the control structure of Netflix. However, if Netflix decides to use share funding, it has to consider the problems of dilution of original control rights carefully.

If Netflix agrees to the idea and uses long-term debt to solve its short-term cash flow problem, this solution will put the most pressure on Netflix's future cash flow. When Netflix uses the financing policy of "long term debt, short term investment", it could survive the current period; however, whether it can survive the future cash crisis is a question in the current period. However, as the principal repayment date is far in the future, Netflix has enough time to attempt different ways to generate positive cash flow and alleviate the future cash pressure. For example, during the long-term debt period, Netflix could use the borrowed cash to innovate a new business model to boost sales. Moreover, as the time period is long, investment projects with a positive net profit value are more likely to occur, which means Netflix has more possibility and time to evaluate and involve itself in the profitable investment. Even if there is a real debt crisis in the future, Netflix could use a talented professional finance team to properly manage the maturity date, forecast the risk of future cash crises, and consider issuing another long-term debt to solve the current problems. Therefore, future cash pressure can be eased by the long-term repayment period.

4.2. Suggestion on Costs of Financing

Through analyzing the influence of the after-tax cost of debt on Netflix, this paper also suggests that when Netflix determines to issue long-term notes, it should use the fixed interest rate when interest rates are expected to rise in the future. The main reasons for this suggestion are the management convenience of a fixed interest rate over a floating rate and the risk-hedging advantage of the fixed interest rate.

A fixed interest rate can save Netflix time and money in managing the long-term cost of debt. In 1911, Irving Fisher came up with the famous Fisher effect, which showed that the nominal interest rate is closely linked to the real interest rate and the inflation rate. The Fisher effect states that the inflation rate can affect the nominal interest rate, implying that the macroeconomic environment has a significant impact on nominal interest rates. As a result, interest rate management is inextricably linked to the market situation, which is difficult to control. If Netflix issues long-term debt with a variable interest rate as the cost of debt, it will have to pay a lot more to keep up with the cost of debt. For example, Netflix will need a skilled, professional finance team to keep an eye on interest rates over time and take steps to reduce the cost of debt when interest rates go up. Furthermore, if Netflix decides to issue callable bonds, it should consider whether to call the bond back when the cost of debt changes. Due to the uncertainty caused by the floating interest rate, Netflix would have to pay more for labor, management, and other hidden costs.

If Netflix chooses to use a fixed interest rate as the long-term cost of debt, the best advantage is that it could hedge the risk and uncertainty of increasing costs. The apparent example is Netflix’s past fixed-rate borrowing. In April 2019, Netflix issued 3.875% Senior Notes to borrow €1200 million in principal amounts denominated in euros [9]. Even in 2022, continued rate hikes from the Federal Reserve caused interest rates to increase, but past fixed-rate borrowing enabled Netflix to not be affected by the external macro environment and maintain the rate of 3.875% [9]. Also, Netflix could achieve forward-looking financial planning through the use of the fixed rate. For example, by using the fixed interest rate, Netflix could determine the fixed interest expenses for the following years, which means Netflix will have a known fixed cash outflow in advance. Thus, when Netflix considers another debt or another large amount of cash outflows for certain years, it could clearly know whether the company’s remaining cash flows could support the operations and make clear-cut decisions.

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Sometimes, there may be situations where interest rates are low, which cause Netflix to incur a higher cost of debt. Therefore, if Netflix anticipates the interest rate will stay at a low level, it could use the floating rate to issue short-term debt. However, due to the long-term nature of the debt, the interest rate is less likely to stay low all the time. There are some points at which the interest rate will increase. Thus, Netflix had better use the fixed interest rate to issue long-term debt if it anticipates the interest rate will increase in the following years.

5. Conclusion

In 2018 and 2019, the streaming media market expanded dramatically. Many giant competitors entered the streaming media market. Netflix extended its content library massively to compete with the competition. On this basis, this paper investigated Netflix's financing policy and further explored what impacts the policy would generate on Netflix's liquidity and financing costs by using Netflix's annual reports from 2017 to 2022. This paper concluded that Netflix used a long-term debt financing policy to meet the short-term cash demand in 2018 and 2019, and that this long-term debt financing policy didn't generate liquidity problems for Netflix in 2018 and 2019. This aspect of the research suggested that Netflix could use long-term debt financing to make short-term investments by properly managing the due dates of its debts. This research also concluded that through issuing long-term debts dominated in euros and using fixed interest rates, Netflix acquired the lower costs of debt successfully, but the long-term debt generated a large amount of flotation costs, which add no value to Netflix. And this aspect of the research suggested that Netflix could use debts dominated in euros with fixed interest rates when interest rates are expected to increase to lower the cost of debt.

This paper broke down and organized the long-term debts and cash flows from Netflix's annual reports from 2017 to 2022. This gives future studies more data to work with and makes it easier to do research on how to finance and invest. This research looked at the relationship between Netflix's long-term debt and short-term cash flow in 2018 and 2019. It also checked if it was possible for the streaming media industry to meet short-term cash needs with long-term debt financing.

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