



The Financial Impact of Covid-19 on Technology, Entertainment and Mass Media Sector
Caren Claud Fayyad
Beirut Arab University, Lebanon

ABSTRACT

During the emergence of Covid-19, governments forced firms and corporations to work remotely and thus, leads to change the behavior and lifestyle of consumer worldwide. In this paper, we studied the impact of Covid-19 on Media sector through the case of Netflix, Inc.'s financial performance. Based on financial data from 2018 to 2021, this research employed different financial proxies namely liquidity, solvency, capital structure and profitability. The results of this study revealed that the pandemic had a positive impact on the financial profitability of media and entertainment sector. The development of Covid-19 increased the financial performance of Netflix.

Keywords: Covid-19, Technology, Financial Performance, Media, Capital Structure.

1- Introduction

On 31 December 2019, the unforeseen outbreak of coronavirus disease (Covid-19) was reported in Wuhan, China. For two years, the global pandemic has been threatening the lives of many people. Numerous governments had to act immediately to protect the health of the citizens as well as the economy. They impose a full lockdown to stop the spread of this infectious disease. Many people were sitting at home bored, anxious, and afraid of going out.

Many international firms that work in technology and entertainment industry found the lockdown as a great opportunity to raise their activities and financial performance. Netflix, Inc. is one of well-known firms that they got profit from the Covid-19 pandemic period. This entertainment firm succeeded to raise both customers number and business activities.

The objective of this research is to reveal the impact of COVID-19 pandemic period on the financial performance on media and communication sector through the case study of Netflix, Inc.

The first section explores the literature review of the pandemic impact on the entertainment and media firms. The second section reveals the impact on the Covid-19 on a specific corporation: the Netflix, Inc.

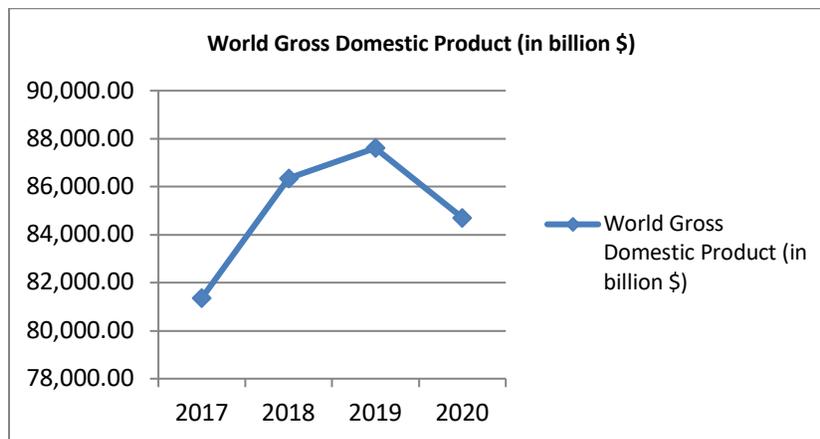
2-Literature Review

2-1-The impact of covid-19

Covid-19 has been developed in a frightening and startling speed, infecting millions of civilians. The pandemic created a prominent level of uncertainty and change. The economic damage was very severe. This unforeseen disease has had a drastic impact on every single industry in the worldwide economy. Due to the coronavirus outbreak, many businesses closed their doors due to the lockdown's restrictions (Worldbank.org, 2020)

Figure 1 shows the impact of Covid-19 on the World Gross Domestic Product (GDP). In 2020, the world GDP declined by 3.31% from 2019, which emphasizes the drastic impact of COVID-19 on the world economy.

Figure 1: Economic impact of Covid-19, source:(Macrotrends)



During the lockdown period movie theaters, cinemas, as well as production studios were closed. And people went from analog daily interactions to online interactions. Thus, by staying at home consumers have adopted streaming services as a means of survival through this frightening period.

The new streaming video services like Netflix, Inc., Disney, Hulu, and Amazon provided quarantined people with access to stream TV shows and movies across several screens and whenever they wanted. Before Covid-19, people were already starting to adopt the idea of

streaming movies and TV shows from their homes. However, covid-19 was seen to speed up the process of streaming services' adoption which would have taken years if not decades.

Despite the market recession during the pandemic period, the digital entertainment's revenue had increased by 31%; a total of \$61.8 billion. Since 2019, the number of subscribers has gone up 26%; a total of 1.1 billion video and streaming services subscribers. However, unlike digital entertainment, the physical entertainment revenue continued to decelerate. (Haymilian.com) (Adgate, 2021)

2-2- Technology and the new trends

Throughout the Coronavirus pandemic a lot has happened to technology. Technology adoption has gone up at a fast pace in a fleeting period. Due to advanced technology, people all around the globe were able to survive these challenging times. Meetings, classes, interviews, movies, and TV shows were available to the world online from home. Technology was the way out of the coronavirus pandemic.

One of the important questions being asked these days is what technology would look like after the pandemic? According to Fareed Zakaria, our life post-pandemic "is going to be, in many aspects, a sped-up version of the world we knew." (Elnaj, 2021). The COVID-19 pandemic has given a boost to the adoption of technology, the adoption which would have taken not only years but decades to dominate our lives. We have seen how the world converted from highly analog daily interactions at school, work, and entertainment venues to the exact opposite in just a fleeting period.

We can imagine and analyze the impact of Covid-19 on our new normal lives by looking back at the impact of previous pandemics. In China, in 2005, the SARS epidemic accelerated the adoption of e-commerce. Furthermore, the 1918 pandemic gave strength to research and innovation in microbiology, clinical infectious diseases, and public health.

There will be an even greater acceleration of digitalization because we have already seen how several analog daily interactions switched to being delivered online; from distance learning, to work from home, online shopping, and entertainment.

Work from home seemed to have been successful for many employees with accelerated productivity. However, the question is how will it look like after the pandemic? According to a

Gartner survey, 82% of employers will allow their employees to work remotely some of the time, and 47% say that they will do it all the time. The future of work, or at least where it will be done, will be highly virtual. Hence, there will be a great acceleration of technology adoption post-pandemic (Elnaj, 2021).

3. Case study: Netflix

3.1. Netflix Background

Netflix, Inc.'s corporate mission is "to entertain the world". The main mission of Netflix is to entertain the worldwide. Netflix provides services for subscribers in 190 countries in 30 languages. Netflix is considered as the world's biggest fan of entertainment. The company's vision statement has 3 main points which include continued leadership, internet, and entertainment. Netflix's organizational structure motivates the company's employees to help the business achieve continued evolution by satisfying the vision statement and hence, ensuring continuous customer satisfaction and leadership.

The popularity of Netflix's streaming services has been increasing last years. the corporation never fails to satisfy and impress its customers. Consequently, their customers loyalty level has increased for 88% (Comparably.com).

Figure 2: number of customers, source:(Statista.com, 2022)

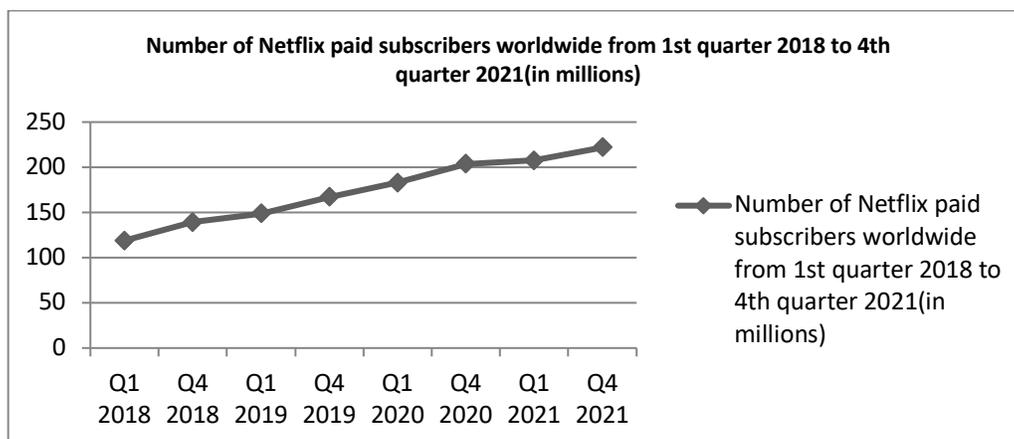


Figure 2 shows how the number of subscribers increased from 118.9 million subscribers in the 1st quarter 2018 to 148.86 million subscribers in the 1st quarter 2019. Moreover, Netflix's paid subscribers increased from 167.09 million in the 4th quarter 2019 to 203.66 million in the 4th quarter 2020 until it reached 221.84 million subscribers in the 4th quarter 2021.

3.2. Financial Analysis of Netflix before and during the pandemic period

Financial analysis is a process whereby financial statements of businesses are evaluated and it's a process used to evaluate a company's financial performance. Typically, this process is used to evaluate a company's solvency, liquidity, stability, and profitability.

In this part, we are going to study and analyze Netflix's financial statements during the years 2018, 2019, 2020, and 2021. Through this analysis and using ratio analysis, we are going to gain insight on Netflix's liquidity, solvability, performance, and capital structure; hence identifying the impact of Covid-19 on Netflix, Inc. Table 1 shows the different variables employed to measure the impact of Covid-19 on Netflix.

Table 1: Financial ratios

Liquidity ratios	Description
$\text{Current Ratio} = \frac{(\text{current assets})}{\text{current liabilities}}$	The current ratio is one of the liquidity ratios and it determines the ability of a company to pay back its short-term debt obligations in addition to financial obligations that must be paid within one year.
$\text{Quick Ratio} = \frac{(\text{Current assets} - \text{inventories})}{\text{current liabilities}}$	The quick liquidity ratio measures a company's ability to meet its short-term obligations with its most liquid, easily-convertible-to-cash assets.
$\text{Cash Ratio} = \frac{\text{cash and cash equivalents}}{\text{current liabilities}}$	The cash ratio is a liquidity ratio which determines the financial ability of a company to pay its short-term liabilities obligations with cash and cash equivalents. This ratio only considers a company's most liquid resources.
Solvability Ratios	Description
$\text{Interest coverage ratio} = \frac{\text{EBIT}}{\text{interest expenses}}$	The interest coverage ratio measures how many times a company can pay interest on its debt with its available earnings.
$\text{Debt to assets ratio} = \frac{\text{Debt}}{\text{Assets}}$	The debt to assets ratio measures the ability of a company to cover its debt with the company's available assets.
$\text{Shareholder Equity Ratio} = \frac{\text{Total shareholder equity}}{\text{Total Assets}}$	The equity ratio measures how much the company is funded by equity. The higher the number the less debt the company has on its books compared with its equity, the healthier the company.
$\text{Debt - to - equity - ratio} = \frac{\text{Debt outstanding}}{\text{equity}}$	The debt to equity measures how much a company is funded by debt. The higher the ratio the more debt a company has on its books; the higher the chance of default.
Capital Structure Ratios	Description

$Debt\ to\ assets\ ratio = \frac{total\ debt}{total\ assets}$	The debt to assets ratio measures the ability of a company to cover its debt with the company's available assets.
$Debt\ to\ equity\ ratio = \frac{debt\ outstanding}{equity}$	The debt to equity measures how much a company is funded by debt. The higher the ratio the more debt a company has on its books; the higher the chance of default.
$Capitalization\ Ratio = \frac{long\ term\ debt}{long\ term\ debt + shareholders'\ equity}$	The capitalization ratio reflects the extent to which a company is operating on its equity. The higher the ratio the more leveraged a company is, which indicates that the company has a higher risk of insolvency.
Profitability Ratios	Description
$Return\ on\ assets = \frac{net\ income}{total\ assets}$	Return on assets ratio (ROA) is used to measure how efficient a company is at using its own assets to generate profit.
$Return\ on\ equity = \frac{Net\ Income}{Total\ Shareholder's\ equity}$	Return on equity ROE is used to measure a company's profitability and how efficient it is at generating profits depending on its equity.
$Gross\ Profit\ Margin = \frac{Net\ Sales - COGS}{Net\ Sales}$	Gross profit margin is used to measure the ability of a company to generate gross profit from sales of goods, also known as sales revenue. And it indicates the amount of revenue and whether it can cover operating expenditures.

Table 1: liquidity ratios of Netflix

Liquidity Ratios	Year 2018	Year 2019	Year 2020	Year 2021
Current Ratio	= 1.494	= 0.901	= 1.251	= 0.951
Quick Ratio	= 1.494	= 0.901	= 1.251	= 0.951
Cash Ratio	= 0.58	= 0.73	= 1.05	= 0.71

Netflix Inc.'s current and quick ratios improved from 2019 to 2020 but then slightly deteriorated from 2020 to 2021. Moreover, Netflix Inc.'s cash ratio improved from 2019 to 2020 but then deteriorated significantly from 2020 to 2021.

For a company not to be short on cash its current ratio should be between 1.5 and 3.0 and the quick ratio should be above 1.0. We can see how Netflix's current and quick ratios decreased from 1.494 in 2018 to 0.901 in 2019. However, in 2020 the ratios increased to 1.251 and then decrease to 0.951 in 2021. Netflix's current ratio in 2019 was below 1.5 which indicates that the company was not in a good liquidity position. In addition, even though the current ratio in 2020 was slightly below 1.5, however we can see that the ratio improved from that of 2019 which

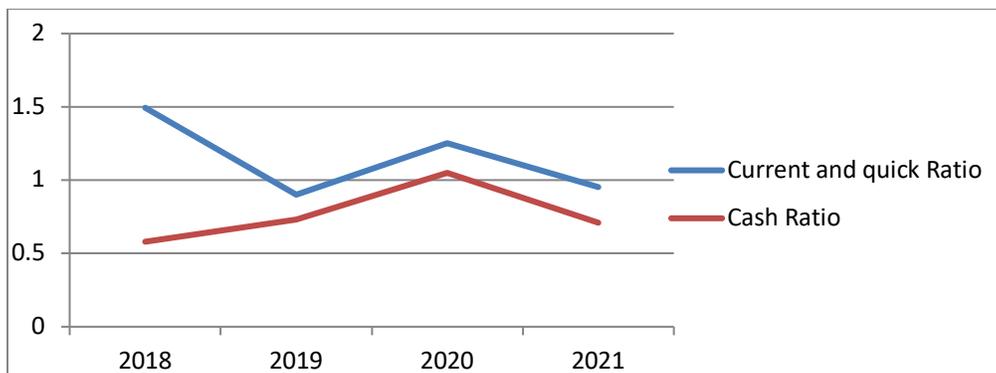
indicates that the company had a better liquidity position in 2020, and the company's ability to pay back its short-term debt obligations improved during Covid-19.

Regarding the quick ratios in 2018 and 2020, they were above 1.0 and indicated that the company was in an advantageous position; able to pay back its debt obligations in addition to financial obligations. However, in 2019 and 2021, the current ratio was below 1.0; this indicates that the company was slightly short on cash. In 2019, according to the quick ratio, Netflix had \$0.9 of liquid assets to meet each \$1 of its short-term obligations. However, in 2020, Netflix had \$1.251 to meet \$1 of its short-term obligations. Hence, the company had a better liquidity position during Covid-19 in 2020 than that of 2019.

As for the cash ratio, in 2018, 2019, and 2021, it was below 1.0 which indicated that the company's current liabilities were greater than its cash and cash equivalents. This indicates that the company was not in a very good liquidity position to cover its short-term liabilities. However, we can see how the cash ratio in 2020 improved and became 1.05 which is above 1.0. This indicates that Netflix's liquidity position and financial ability to cover its short-term liabilities obligations with cash and cash equivalents improved in 2020. Note that the cash ratio increased 43.8% in 2020 and it this indicates that Netflix, Inc. had more than enough cash to cover its short-term liabilities.

According to the liquidity ratios, we can conclude that Netflix's liquidity position has improved during the year 2020 which indicates that the company's ability to cover its current liabilities improved.

Figure 3: Liquidity level of Netflix



Solvency determines the ability of a company to meet its long-term debts and financial obligations. Therefore, to identify whether Netflix, Inc.'s cash flows are sufficient to meet its long-term financial obligations we need to study and analyze several solvency ratios. In the following table, all solvency ratios are presented from 2018 to 2021:

Table 2: solvency ratios of Netflix

Solvability Ratios	Year 2018	Year 2019	Year 2020	Year 2021
Interest Coverage Ratio	= 3.82	= 4.16	= 5.98	= 8.09
Debt to Assets Ratio	= 0.39	=0.48	= 0.47	= 0.41
Shareholder Equity Ratio	= 0.2017	= 0.2232	= 0.2817	= 0.3555
Debt to Equity Ratio	=1.98	= 2.16	= 1.67	= 1.14

Based on the results presented in Table above, the interest coverage ratio has increased from 3.82 in 2018 to 8.09 in 2021. In 2019 there was an 8.9% increase in the interest coverage ratio from 2018 whereas in 2020, there was a 43.75% increase in the interest coverage ratio. Moreover, in the years 2018 to 2021 the interest coverage ratio was above 1.5 which indicates that Netflix, Inc. was in a strong solvency position; hence the company had the ability to pay interest several times on its debt with its available earnings.

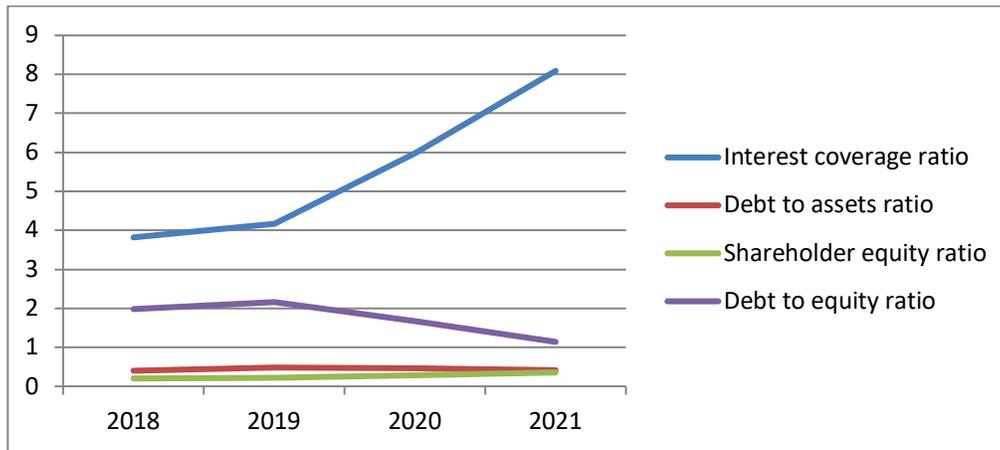
Regarding the debt to assets ratio, it has increased from 0.39 in 2018 to 0.48 in 2019. Then, it decreased slightly to 0.47 in 2020 and 0.41 in 2021. The debt to assets ratio is below 1.0; this indicates that Netflix, Inc. is not funded by debt; hence has a good solvency position. And since the debt to assets ratio measures the ability of company to cover its debt with the company's available assets, we can conclude that Netflix has a good position in covering the company's debt with its available assets.

As for the shareholder equity ratio, it has improved from 0.2017 in 2018 until it reached 0.3555 in 2021. Since the shareholder equity ratio measures how much a company is funded by equity rather than debt, the improvement in the ratio indicates that the company's equity funding increased as opposed to its debt. Hence, the company's debt decreased in its books. Therefore, the company had a good solvency position and can cover its long-term debts.

The debt-to-equity ratio has increased from 1.98 in 2018 to 2.16 in 2019, but then slightly decreased to 1.67 in 2020 and to 1.14 in 2021. This indicates that Netflix had more debt on its books in 2018 and 2019. Furthermore, Netflix had less debt on its books in 2020 and 2021. Since the debt to equity ratio measures how much a company is funded by debt, this indicates that the company became less funded by debt and the likelihood of default has decreased; the company's situation has improved.

According to the solvency ratios and its analysis, we can conclude that Netflix's solvency has improved during the year 2020; during the Covid-19 pandemic. This shows how during Covid-19 the ratios have improved. Consequently, Netflix, Inc.'s debt in its books has decreased.

Figure 4: solvency ratios of Netflix



Capital structure is the mix between debt and equity which are used to finance a business's operations and growth. To assess the strength of a company's capital structure, analysts use several ratios which are presented in the following table:

Table 4: Capital structure ratios of Netflix

Capital Structure Ratios	2018	2019	2020	2021
Debt to Assets Ratio	= 0.40	= 0.48	= 0.47	= 0.40
Debt to Equity Ratio	=1.98	= 2.16	= 1.67	= 1.14
Capitalization Ratio	= 0.66	= 0.68	= 0.62	= 0.52

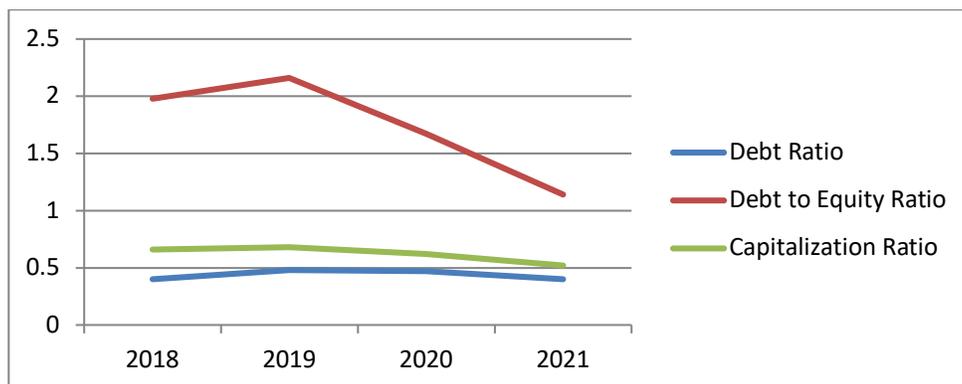
As for the debt to assets ratio, it has increased from 0.4 in 2018 to 0.48 in 2019. Then, it decreased to 0.47 in 2020 and 0.40 in 2021. The debt to assets ratio is less than 1.0 during all four period; the company can cover its debt with its available assets. In addition, the debt to assets ratio has improved in 2020; hence the company's ability to cover its debt with its available assets has improved during Covid-19.

The debt-to-equity ratio has increased from 1.98 in 2018 to 2.16 in 2019, but then slightly decreased to 1.67 in 2020 and to 1.14 in 2021. This indicates that Netflix had more debt on its books in 2018 and 2019. Furthermore, Netflix had less debt on its books in 2020 and 2021. Since the debt-to-equity ratio measures how much a company is funded by debt, this indicates that the company became less funded by debt and the likelihood of default has decreased; the company's situation has improved.

Moreover, the capitalization ratio decreased from 0.68 in 2019 to 0.62 in 2020 and 0.52 in 2021. Since the long-term debt to capitalization ratio reflects the extent to which a company is operating on its equity; the lower the ratio the better and the less leveraged a company is. Therefore, we can see how in 2020 the debt capitalization improved, and the company had a lower risk of insolvency. In addition, the capitalization ratio is below 1.0 in all four periods, which indicates that the company had a strong capital structure.

Accordingly, Netflix had a strong capital structure in all four periods. However we should note that the capital structure improved and became even stronger in 2020; the company's ability to cover its debt improved, the company had less debt on its books, and the company had a lower risk of insolvency.

Figure 5: Capital structure of Netflix



Profitability determines the extent to which a business, an investment, or a project generates profit. To assess a company’s profitability, analysts use several ratios which are included in the following table:

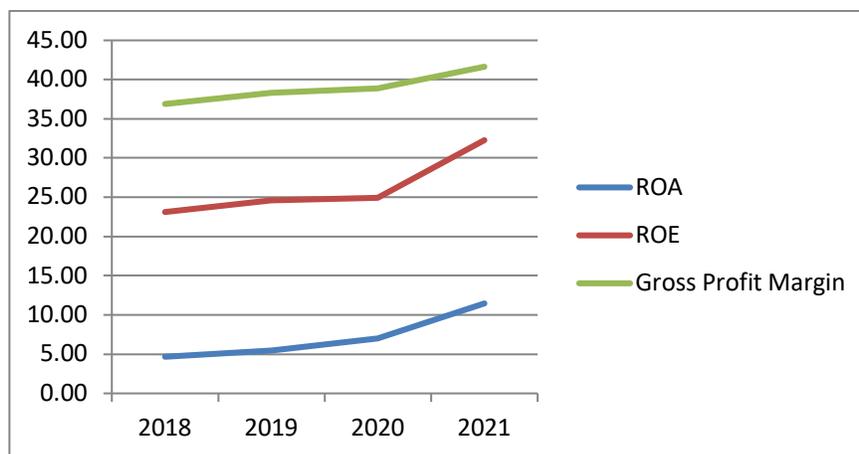
Table 5: Profitability ratios of Netflix

Profitability Ratios	2018	2019	2020	2021
Return on Assets	= 4.67%	= 5.5%	= 7.02%	= 11.47%
Return on Equity	= 23.12%	= 24.62%	= 24.95%	= 32.28%
Gross Profit Margin	=36.89%	= 38.28%	=38.89%	= 41.64%

The results of profitability ratios show that the return on assets ROA ratio was slightly below 5%. The value of ROA increased from 5.5% in 2019 until it reached 11.47% in 2021. The return on equity ROE ratio was above 15% during the studied period; this indicates that the company achieved a positive income relative to its equity level. Regarding the gross profit margin, the ratio improved gradually from 36.89% in 2018 until it reached 41.64% in 2021.

These results indicate that the profitability ratios of the company increased during the pandemic period.

Figure 6: Profitability of Netflix



4- Conclusion

Since 31 December 2019, the unforeseen pandemic of Covid-19 has been threatening the lives of many people all around the world. The world GDP has decreased by 3.31% from 2019 which emphasizes the drastic impact of Covid-19 on the world economy.

According to our financial and ratio analysis we can conclude that Covid-19; the unforeseen pandemic that threatened the world in 2020, had a positive financial impact on Netflix, Inc. and thus leads to improve its capital structure, solvency, profitability, and liquidity position.

To sustain its strong position and remain one of the best streaming services, Netflix can apply several steps and implement several strategies. The company can bring back the free trial feature which allows people to try Netflix's services for free; this can potentially increase its subscribers for the long term. Moreover, Netflix can limit and minimize the number of profiles for each account which will in turn increase the number of paid subscribers.

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