Investment Value Options for US-Listed Companies in The Media Industry

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Abstract. At the moment, video-centric applications offer one of the most popular forms of online entertainment due to accessibility and low cost. However, with the annual increase in operating income, cash consumption and continuous loss is also accelerating, and only a few of them can make profits. This paper compares the operating model, profitability level and solvency of Netflix, Bilibili and Iqiyi, and reflects the differences among them through the data of financial statements. It is concluded that Netflix is the most capable operator, Bilibili is the least capable operator and has the risk of debt, while Iqiyi has the worst ability to repay debt. At the same time provide investors with some advice or reference.

Keywords: Video industry, Data contrast, financial analysis, Investment advice.

1. Introduction

Due to the accessibility and convenience, video-centric applications offer one of the most preferred forms of online entertainment. However, accompanied by the annually increasing operating revenue is the accelerating cash burn and continued loss, and only a few of those can operate profitably: Netflix, a global video firm, has been experiencing a declining cash flow and eventually had it's first boosting in cash flow since 2020; at the same time, Iqiyi, one of the major video platforms in China, is running continuously in the red based on its previously released financial report. The loss-making business is not only a hit to operators, but also to investors--some young companies, though with a high growth rate and no profits stock pattern, have demonstrated solid performance, but some have been mired in improving profitability and have little hope to get through the mud. Therefore, private investors that intend to continue mining in this industry should be more cautious and prudent when making decisions, viewing from all lenses and evaluating properly the company's current and future value.

An enterprise's financing decisions sometimes are derived from capital structure; therefore, it is important to understand its financing behavior of it. y using the panel data of China's A-share listed companies from 2007 to 2017, Yuan concludes that the changing trend of enterprise capital structure is consistent with the GDP prosperity index and the economic environment [1]. Schargrodsky analyzed whether the capital structure of enterprises will be influenced by the degree of product market competition faced. through studying the effect of competition on leverage in US newspaper companies, it reveals that the debt ratio of oligopolistic firms is higher than that of monopolistic firms. through prices of capital structure, it indicates that for oligopoly enterprises, the debt ratio has a significant positive impact on advertising expenses whereas the effect is not essential for monopolies [2]. Through studying, Zhong et al. revealed that profitability has a significant negative correlation with asset-liability ratio whereas a significant positive correlation with shareholders' equity. Besides, there is no significant correlation between profitability and liquidity ratio. Therefore, it is of great importance to optimize Capital structure so that the ability of listed companies in the culture and media industry would be improved [3]. Mega selected 10 pharmaceutical companies listed on the Indonesian Stock Exchange from 2009 to 2013. through purview sampling, and adopting the literature research method, the results show that the influence of financial leverage measured by the debt-equity ratio on stock returns is negative and insignificant. The systematic risk measured by Beta (β) has a positive and insignificant impact on stock returns. Economic value added (EVA) has a significant negative impact on stock returns [4]. Aivazian et al. used the information of Canadian listed companies, and this paper studies the influence of financial leverage on corporate investment decisions. It shows that leverage is negatively correlated with investment, and this negative correlation effect is significantly stronger for firms with low growth opportunities than for firms with high growth opportunities [5]. Irina and Ann examined Netflix in terms of its penetration in new markets and streaming business in their case study to suggest the optimal firm strategy in the subsequent operation. In the study, current risk analysis has been drawn to identify external forces, eventually leading to the conclusion that the company should keep reinforcing both existing and potential partnerships to minimize the risk of globalizing and continue to explore the newly available region and user base [6]. The research of Bilibili, a China content platform, conducted by Jing Gao, of its content, varied in the context of different business stages implied that through three different operating phases, Bilibili eventually found the optimal business model of consolidation and promotion, demonstrating the significance of relatively conservative strategy at the early stage under the circumstance of the emerging economy [7]. To explore the effects of Economic policy uncertainty(EPU) associated with firm characteristics on Capital structure optimization of US companies, Li X and Qiu M compared firm's Debt-financing ratios coming with different EPU, concluding that even the marginal effects of both EPU and firm characteristics are inconsistent under varied circumstances, the increase in EPU would generally lead to a remarkable decrease in corporate debt ratio [8].Zhang Chong, Zhang Xinrui and Yang Zipei Constructed an integrated and objective model of the investment value of enterprise to place the key determinants of corporate value. The model shows that the major factor would be financial indicators, accompanied by the following solvency ranks and profitability [9]. In Cho M's study of the cause and consequence correlation between ownership structure and investment and firm value, an ordinary least squares regression result has been drawn and demonstrates the causality of three elements, indicating the one-way causation of firm value to ownership structure, questioning and existing assumption of the homogeneity of ownership composition [10].

Netflix, Bilibili and Iqiyi are compared in terms of their operating model, profitability level and ability to pay debts. In each part, data derived from the company's financial statements can illustrate the difference between them accurately and precisely. The company's cultural background; social status; effects of Covid-19; policies like copyright and government rules; consumer preference will influence the profit and future development of firms. The following part of this paper will mainly focus on the difference between the three companies, the reasoning analysis of those differences and future prediction of stock investment. This case study analyzes three representative firms--Netflix, Bilibili and Iqiyi-- featured by funding models in order to access their investment value and come up with a general review as well as empirical results to guide investors.

2. Method and Data

2.1 Financial Ratio

Several indicators are adopted to compare the Operating Capacity, Profitability Capacity, Short-term debt repayment capacity, and long-term debt repayment capacity of Iqiyi, Bilibili and Netflix.

For short-term debt repayment, the cash ratio is used to compare the ratio of corporate cash-like assets to their current liabilities. Cash assets include monetary funds owned by enterprises and marketable securities that can be easily liquidated, such as short-term marketable securities that can be sold at any time, discountable and negotiable instruments, etc. They can either be withdrawn, transferred and liquidated at any time, or discounted and liquidated at any time, in short, holding them is equivalent to holding cash. Unlike the quick ratio, the cash ratio is net of accounts receivable and other receivables, which means that the assets securing debt service are assets with almost 100%

realizability, which is the best indicator of a company's ability to directly pay its current liabilities. The cash ratio thus calculated is a safer and more secure measure of short-term solvency.

For long-term debt repayment, cash flow interest coverage multiples are used to compare the net cash flow from operating activities with the interest payable by the enterprise. The higher the interest coverage multiple, the better the ability of the company to pay interest expenses. To maintain normal solvency, the interest coverage multiple should be at least greater than 1, and the higher the ratio, the stronger the long-term solvency of the enterprise. If the interest coverage multiple is too low, the enterprise will face the risk of loss and a decrease in the security and stability of debt service.

2.2 Data

The hyper-competitive internet sector has been through a thorough development, leading to the prosperity of video content supply. From traditional TV and DVD business to online videos which ultimately transcend space and time, over the past decade, the production and distribution of video changed radically. In the study, each of the three companies was selected to develop a unique business and operating model in order to better adapt to market variation.

Netflix, one of the world's leading streaming entertainment services, focuses on the DVD rental service and streaming video business. Netflix adopted PGC (Professional Generated Content) strategy from the start, which not only ensures good quality but also is provided high commercial potential. Furthermore, Netflix operates as a single-operating segment whose revenues are primarily derived from monthly membership fees for services related to streaming content to their members. All these traits demonstrate Netflix's simplex industrial structure.

Different from Netflix, Iqiyi and Bilibili both rely on PUGC（Professional User Generated Content) but with distinct proportional structure--Iqiyi generates revenues greatly from licensed content, self-producing movies, web dramas, variety shows and entertainment programs, setting a professional and quality benchmark for online self-produced content. Meanwhile, Iqiyi has been exploring new technologies and modes of advertising, using the "SWS" model ("Search" - "Watch" - "Share") as the core competitiveness, to carry out high-quality, cost-effective video marketing services [6].

Compared with Netflix, Bilibili is a video-sharing website where users are not only viewers but the content maker. Motivated by their interests, content creators upload their original videos in various domains affiliating to different sub-cultures, attracting more new users who can in turn become potential creators, sparking a virtual beneficial cycle. With a larger user base, Bilibili is now able to monetize its business through multiple avenues including games, e-commerce, advertising and value-added services.

3. Results

This paper selected three different aspects to analyze the listed companies, including operating ability, profitability, and ability to repay debts. As shown in Table 1, Netflix is the most capable operator, while Bilibili is the least capable and is at risk of being in debt. But Bilibili's business cycle is negative, suggesting its assets are flowing fast.

Table 1. The operating ability of three listed companies

Company	Accounts Receivable Turnover Ratio	Business cycle	Current asset turnover ratio	Total assets turnover ratio	Fixed assets turnover
Iqiyi-l	6.65	54.9	1.81	0.67	13.16
Netflix-k	41.97	8.58	3.33	0.71	26.01
Bilibili-c	23.94	-59.94	0.53	0.41	14.1

Table 2 presents Netflix has the highest values in all six indicators, and the difference is significant. Meanwhile, it is noted that Bilibili and Netflix report negative values with exception of Iqiyi's Gross sales (which are shown as 9.95) ， which implies the company's continuous loss in business operations.

Table 2. Profitability of three listed companies

Company	Operating margin	Gross profit margin	Net sales margin	Return on total asset(ROA)	Return on tangible asset	Return on Capital
Iqiyi-l	-14.66	20.41%	-20.19	-13.8	-24.82	-11.71
Netflix-k	20.86	24.6%	17.23	12.20	37.13	13.87
Bilibili-c	-33.17	19%	-35.03	-18.03	-20.71	-43.60

By comparison, Table 3 of the current ratio, quick ratio, cash ratio and cash flow ratio for Bilibili are higher than Iqiyi and Netflix. Iqiyi has the highest leverage ratio, undoubtedly, their figures of that four ratios are the lowest, which means their ability to repay debts is the worst.

Table 3. Ability to repay debts of three listed companies

Company	current ratio	quick ratio	cash ratio	cash flow ratio	leverage ratio
Iqiyi-l	0.51	0.51	0.13	-0.78	86.64
Netflix-k	0.95	0.84	0.71	0.05	35.59
Bilibili-c	3.02	2.98	2.5	（13.43）	37

4. Discussion

4.1 Operating model

There are obvious differences in business between the three companies. Bilibili operates in a wide range of sectors, with mobile games accounting for 27 percent, value-added services 36 percent, advertising 23 percent, and e-commerce and other businesses 14 percent. Take 2022Q1 as an example, the total operating expenses of the company are 2,798 million yuan, among which the sales expenses are 1,254 million yuan. The increase is mainly caused by the increase in brand expenses and sales and marketing personnel expenses, and the management expenses are 535 million yuan. The increase was mainly due to higher general and administrative staff, equity incentive expense, rental expense and other general and administrative expenses; The R&D expense is 1.009 billion yuan, and the R&D expense ratio is 20%. The increase in R&D expenses is mainly caused by the increase in R&D personnel and equity incentive expense. The company's main expenses are sales expenses and research and development expenses. Among them, the main reasons for the increment of sales expenses are the contribution to active users, incentive expenses such as tipping for UP hosts, and the company's efforts to develop live broadcast business and the share of anchors. Research and development expenses mainly come from the company's game research and development, continuing to layout investment in the field of games, and improving the self-research ability of games. Since 2022, Bilibili has made several investments and layouts in the game field. It has continuously improved its self-research capability through equity participation and mergers and acquisitions, and further consolidated its overall influence in the field of quadratic games. These inputs are the strategic layout of the company, which will continue to unlock the potential in the long-term development. And it's not going to be profitable in the short term.

While Netflix and Iqiyi are both single-unit businesses, Netflix's model is not complicated. It uses content to leverage users to pay, and paid money is invested in the content ecosystem to further drive the growth of paying users. The key to such a profitable operation is having enough high-quality content at one end and huge paying users at the other. As Netflix continues to expand the market, the marginal cost of content can be lowered indefinitely as paying subscribers to reach a certain scale, requiring lower costs and allowing the video platform to cover content spending and turn a profit.

However, Iqiyi has a similar development and operation model, but it has been losing money for two main reasons. First, the maturity of the film and television industry in the US and China is different. Iqiyi starts by investing in dramas at a small cost. The quantity and quality of original content and the richness of the content library are not as good as those of Netflix, and there are few high-quality exclusive contents, which leads to low user stickiness. The second is that Iqiyi mainly enters the domestic market. Even if the number of members exceeds 100 million, the domestic traffic peak and the saturation of the local market will continue. To win users for a long time, Iqiyi will try the strategy of low prices.

4.2 Operating model and current potential

Between the years 1997 and 2006, the innovative and successful operating model of Netflix overtook the status of the most popular firm in the US entertainment industry called Blockbuster. At that time, improving the quality of films and TV series are what Netflix mainly concentrated on. They launched DVD-the unpopular material of production due to the expensive cost, however, the quality of DVD was far better than that of traditional common materials like VCD and VHS. Since Netflix was first set up, it put the viewing of audiences in the first place, it provided the best platform for the audience to watch movies and TV shows with a wide range of sources and viewing quality. Vice versa, the audience loyalty of Netflix was better than that of Iqiyi and Bilibili.

By comparison, the cultural background of Iqiyi is business selling. In the very beginning, Iqiyi was a platform mainly for advertisement rather than film watching, profit from advertisements promote them to develop. Since the audience constantly getting disrupted by numerous ads. Thus the watching quality worsens than that of Netflix.

Bilibili attracts users by adopting ACG and UGC. ACG means animation, comics, and games, while UGC means user-generated content. The operating model for Bilibili is less costly, unlike Iqiyi or Netflix they need to buy copywriting from other well-known sources like Hollywood, users are also the producers in Bilibili. However, Bilibili launched its first original program in October 2020, which brought new flows of membership fees and development opportunities. Unfortunately, the difference between the company's cultural background and its original program resulted in a collision, which might prevent them achieve the expected future. The user positioning of Bilibili is over-precise. For example, some senior enthusiasts in the secondary field have no judgment on the creation of films and TV dramas. As a bullet screen on social media, users' thinking is restricted in the bullet screen. Thus, the limited users and unchangeable culture add risks for further development in the industries of films and TV dramas.

Copyright restriction is the reason why Netflix has a higher profitability ability than Iqiyi and Bilibili. In July of 2019, Iqiyi launched its overseas vision across the world, which brought them more users and more profit. But due to geographical restrictions, some TV series and films are unavailable to watch. There are fewer differences in either the film resources or download approaches for Netflix in different countries, for example, in China, after the download of a VPN, users can directly access it as the way people did in America.

4.3 Regulatory policy

According to its income statement Netflix, 60% of its total revenue were coming from the international department. Even though the supply of US currency was increasing dramatically, the significant status of US currency in international trade forced the demand for it also increase, so US currency is still in appreciation. The rising value of the dollar decreases the international competitiveness of Netflix, which cause the actual flow of users far below the predicted amount. According to CBA, Netflix's total revenue would increase by 4 percentage points to reach 13%, if the foreign exchange impact of 340 million US dollars was excluded. Thus, although the price-to-earnings ratio of Netflix was higher than that of Iqiyi and Bilibili, by comparison with the US average level of the entertainment industry (26), the figure was not optimal.

At the same time, more branch business means more, which is unique to Bilibili among the three companies, is profitable and will bring more investment, but it is more about the pressure on the gaming business. The pressure on games is closely related to increased regulation of the industry and the lack of research and development capabilities of companies. From the point of view of the industry, the game industry continues to be in a strict regulatory environment, the main regulatory measures in addition to license approval, also include the introduction of juvenile anti-addiction measures. From the company's point of view, Bilibili's self-development capability is relatively limited, and the lack of new blockbuster products is also a key factor. Besides games, Bilibili's value-added business is also under pressure, but the good development of live streaming and a large membership business will also drive the revenue growth of the value-added business. Bilibili station's rich PUGV content and live streaming ecology form a positive cycle. Although Bilibili has strict control over advertising, it is difficult to see many patch ads in videos, but the efficiency of Bilibili's advertising business continues to improve by continuously enriching the advertising scenes and products. In the first quarter, advertising revenue rose 46 percent from a year earlier to 1.041 billion yuan. The e-commerce logistics problems caused by the epidemic have affected the performance efficiency of commodities to a certain extent. Station B provides services such as delayed delivery and automatic refunds for affected users. As logistics gradually resumed in May, e-commerce transactions continued to pick up.

Iqiyi's profit model includes membership service, online advertising service, content distribution and other services, which are respectively 55 percent, 23 percent, 9 percent and 13 percent. From the perspective of the commercialization module, Iqiyi is clearer than Bilibili in realizing commercialization, mainly by selling members and advertising businesses. Iqiyi's main problem is to compete for the copyright of the video. Bilibili is now positioned more as a comprehensive platform.

Netflix's only revenue models are streaming and DVD, which accounts for 99 percent and 1 percent, respectively. At the same time, the monotonous business also brings stable costs. Netflix has several advantages in making money. First, it buys episodes more cheaply than networks do. The second is Netflix's closed environment, because the copyright is concentrated, as long as a big IP, he can build other related projects around it; Finally, because of Netflix's first-mover advantage, it has spread the cost of building a streaming infrastructure, in addition to aggregator production, and has bargaining power, making latecomers incur higher costs. Netflix previously had no advertising and relied only on paid subscriptions. As media companies are aware of the development prospects of the We-media industry, the competition in the industry is becoming increasingly fierce. Netflix remains No. 1 in the U.S. TV market share, but its dominance is not what it used to be. Disney+, Amazon's Prime Video and Apple TV+ are neck and neck with Netflix's paid subscribers.

4.4 Current threat

In 2022, Netflix withdrew from the Russian market, resulting in a decrease of 700000 subscribers and a decrease in investment. At the same time, under the effect of inflation, the income of American households decreased, which result in less purchasing power for households. Surprisingly, the price rising policy published by Netflix resulted in a decreased number of users. Although Netflix is less welcomed than previously, they produce various kind of shows without considerating the cost help them lose more. However, from an investor's point of view, the excessive amount of cost will threaten short-term cash flow and long-term balance sheets. Netflix started its original programs in 2013 when the company's cash flow began to deteriorate sharply. In 2018, its cash flow was negative $3 billion, and in 2019, it was negative $3.27 billion. Netflix's total debt was $14.6 billion during the first quarter of 2022, which was at the upper limit of the total debt target range of $10 billion to $15 billion. Under a large amount of cost, the original operating model of Netflix was very monotonous because they didn't adopt advertisements in films and TV series. However, the entertainment industry is nearly reaching saturated, and Netflix is no more staying as the top company in the US entertainment sector, under the fierce competition and continuous liability Netflix start to adapt advertisements.

4.5 Future prediction of stocks

Netflix and Iqiyi belong to the internet software and service industry, while Bilibili belongs to the packaged software industry, so the comparative analysis will be separated according to their classification of industry. The PE ratio for Bilibili and Iqiyi is lower than the industry level, so its stock price is underestimated, and vice versa, the stock price for Netflix is overestimated. Iqiyi has the lowest PB ratio which refers to fewer investment risks, because the value of net assets in each stock is higher, there will be more space for the rising stock price. However, since the PE ratio for Bilibili and Iqiyi is negative, their net profits were less than 0, with more risks of declining stock prices.

Table 4. Valuation of selected companies

Company	PE (price to earning ratio)	The average level of PE in the industry	PB (price to book ratio)	The average level of PB in the industry
Bilibili	-61.94	30	5.94	12
Netflix	55.2	4.8	17.07	5.1
Iqiyi	-10.97	4.8	5.11	5.1

5. Conclusion

This paper analyzes the value of an investment for Netflix, Bilibili, and Iqiyi. The precise introduction provides a clear background about the company's history for investors and helps them make accurate investment decisions.

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