

Research on the Valuation Method of New Economy Enterprises

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Abstract

With the popularization of the concept of new economy and the upsurge of listing new economy enterprises, researches on the new economy are coming. The focus of this article is to analyze the valuation methods of new economy companies. By summarizing the current situation of new economy companies and their valuation, combining several common enterprise valuation methods to elaborate on the advantages and disadvantages of applying them to new economy enterprises and finally makes suggestions on how to evaluate the value of new economy enterprises fairly.

Keywords

New Economy, Enterprise Valuation, Real Options, Free Cash Flow, P/E Ratio.

1. Introduction

The financial fraud of Luckin Coffee has once again raised public doubts about the valuation of new economy companies. With the wave of globalization and the information technology revolution, new economy companies have developed rapidly. With the reform of the HongKong Stock Exchange listing system in 2018, it has become more and more important. More and more new-economy companies are rushing to go public. Some of them, as the favorite of capital, continue to rise in valuation and their stock prices skyrocket; some have to break their shares and their share prices have collapsed, making huge losses shocking.

Although the new economy represents innovation and hope, and the conditions for listing are loose, there is no denying the fact that it is losing money. How to evaluate the valuation methods of new economy enterprises and make a reasonable enterprise value evaluation plan behind the concept of new economy has become the top priority.

2. Understanding of New Economy Enterprises

2.1. Overview of New Economy Enterprises

The new economy is an industry economy born with the development of economic globalization and information technology. It relies on scientific and technological innovation, knowledge, information and other intangible resources to promote enterprise innovation and development. It mainly includes smart manufacturing, Internet + Internet of Things, e-commerce, Cloud computing and other industries. It is characterized by sustainable economic development, intangible asset investment, and high-tech industrialization.

At present, most new economy enterprises are in the start-up or growth stage, have not yet formed assets with core competitiveness, and do not have a fixed customers. In the early stage, they need to invest a large amount of high-quality human capital to support technology research and development, and a large amount of capital marketing to occupy the market. Therefore, the operating cash flow of new economy enterprises is basically negative. On the other hand, although the company's cash inflows are not enough to make ends meet, resulting in losses, its business model and innovative ideas are favored by investors and have huge future

potential. Such as Meituan and Pinduoduo, with the increasing popularity of user groups, economies of scale have emerged, enabling new-economy companies to grow rapidly after entering the market with new high valuations.

2.2. The Current State of Valuation of New Economy Companies

2.2.1. Current Status of Related Theoretical Research

Academically, there are few studies on the valuation methods of new economy companies in China. The focus of the research is on the accounting management, taxation, and supply chain, etc. of new economy companies. Case analysis is mostly used in valuation. The case is mainly based on e-commerce and Internet companies, combined with related theories and models, to discuss the difficulties in the valuation of new economy companies, analyze the valuation framework, and make recommendations. The international preference for systematic and comprehensive evaluation of corporate value from the investment perspective. Because the Western corporate value evaluation model is relatively mature, its research focus is on the rational improvement of basic variable parameters in the comprehensive evaluation value model.

2.2.2. Current Problems in the Valuation of New Economy Companies

The valuation of new economy companies has always been a difficult problem in the industry, and the choice of valuation methods is inconsistent. At this stage, new economy companies have weak profitability, fast industrial development, and innovative concepts. It is not easy to find a benchmark company in the market; due to different accounting treatment principles, it is difficult for financial statements to provide the data required for valuation. Most new-economy companies are looking forward to a growth turning point in the future. After the turning point, their performance may show exponential growth. These variables have brought huge uncertainty to corporate valuation.

At present, the most common criticism of the valuation of new economy companies is probably: the more losses, the higher the market value. Especially after the great success of companies such as Alibaba and Tencent, people are enthusiastic about Ali's huge dividends, so they show great enthusiasm for new economy companies like Ali and Tencent. Major investment banks are also touting new economy companies, hoping that the new economy companies they invest in can become the next Alibaba or Tencent. On the basis of the success of the predecessors, the market value of new economy enterprises is also rising. Take Pinduoduo as an example. Pinduoduo's issue price was US\$19. The first day it went public, it soared by 39%. The quoted price was US\$26.8, and the valuation was US\$30.531 billion. Converted to RMB, it was worth 207.9 billion. Ali was established in 1999. When Pinduoduo was established in 2015, Ali has been established for nearly 20 years, while Pinduoduo has been established only three years ago, and its development speed is staggering.

3. Evaluation and Analysis of New Economy Enterprise Valuation Methods

3.1. Income Method for Equity Valuation

The theoretical basis of the income method is that the value of any asset is equal to the sum of the present value of its future expected returns. Specifically, it includes the dividend discount method, the cash flow discount method, the net profit discount method and the economic profit discount method. Compared with dividend and profit indicators calculated on the basis of accounting, net cash flow can more comprehensively and accurately reflect all value factors. But when applied to the valuation of new economy enterprises, there are also obvious drawbacks. On the one hand, new economy companies often fail to achieve profitability in a short period of time, and cash flow can not be guaranteed to be positive. In addition, the historical data of the company is needed to predict future cash flow, but the new economy enterprise lacks

corresponding historical data due to its short establishment time; on the other hand, the discount rate of the discounted net cash flow method and the cash flow fluctuates are all constant, which fails to consider the huge potential of the new economy enterprise in the future. Therefore, it is undoubtedly that the value evaluation method based on cash flow is not accurate enough to analyze the new economy enterprises.

3.2. Valuation based on Price Ratio or Price Multiplier

This evaluation method is a kind of market method in the enterprise value evaluation, which refers to comparing the evaluation object with comparable transaction cases or comparable transaction listed companies. The application of the comparable method is simple and convenient, but it should be noted that this method is easier to ignore the differences between the two companies in important factors such as risk, growth, and potential cash flow. The specific valuation methods are: income-based PE, EV/EBITDA; asset-based: EV/IC, PB and other main methods.

At present, the most commonly used method is P/E ratio. Generally, the expected earnings per share for the following year is used to calculate the price-earnings ratio. The plan requires that the valuation company be a listed company with comparable companies in a relatively complete stock exchange market. The unique development model and operation model of new economy enterprises make it difficult for companies to go public and there are fewer comparable companies. The P/E ratio cannot value companies with negative net profits. Most new-economy companies are quite different from traditional companies in terms of profitability, sustainable operation ability, integrity, and risk. In the initial stage, the net profit will be negative because of the failure to realize the income. In this case, the P/E method can not be used. Secondly, the P/E ratio cannot distinguish between the profit created by operating assets and the value created by non-operating assets. On the one hand, it will mislead us in our expectations of the prospects of the main business of the new economy enterprise, and, it will also reduce the comparability between enterprises.

The P/B valuation method is mainly applicable to companies whose intangible assets such as banks, real estate and insurance companies play a key role in corporate income, cash flow and value creation. These industries have a common feature, that is, although the scale of operation is large, the profit is relatively low, and the risk is high, the cycle is strong, the number of fixed assets is large, and the book value is relatively stable. Most new-economy companies have large intangible assets and often play a qualitative role in the value of the company, which is in line with the P/B valuation method.

However, limited by the limited amount of physical assets and high risk, it is still far from the applicable characteristics of the P / B valuation method.

3.3. Real Option Method

The option theory was first proposed by Professor Stewart Myers (1977). He believes that the profit created by an investment plan not only comes from the use of current assets, but also considers the choice of future investment opportunities brought about by the investment plan. Future investment opportunities are relying on physical assets, and the emergence of real options has given investment value to some projects that have been denied by traditional valuation methods. Based on the real option generation B-S model, Monte Carlo experiment, binary tree model and other valuation models.

The new economy enterprise valuation and the real option method valuation meet mainly in three aspects: First, the uncertain value of the enterprise in the future is estimated. Real options regard the uncertainty of a company's future as options, and use volatility to predict the value of the company's future uncertainty. The volatility itself is based on the company's past asset returns and is a kind of uncertainty prediction. There are also forecasts of the company's future

cash flow, but this kind of forecast is a quantitative and deterministic forecast. In comparison, the real option method does not use a constant interest rate and takes the value of risk into account to a certain extent, so it has more advantages. The real option method has a wide range of applications, and it is also applicable to the valuation of new economy companies that have not yet made a profit but have high growth. Traditional valuation methods may directly deny the value of loss-making companies, while real options regard it as an investment strategy the options are conducive to a comprehensive understanding of corporate value. Finally, the valuation of real options combines qualitative factors, such as business management strategies, etc., and the valuation can be based on qualitative factors to determine whether to exercise the right.

Of course, the valuation of the real option method is also flawed. Compared with the income method and the market method, his reasoning calculation process is more complicated, but the biggest problem lies in the harsh assumptions of the model. For example, the BS model requires no tax and transaction costs in the market, Stock prices obey conditions such as normal distribution, Monte Carlo requires thousands of experiments to summarize the law, etc. It is difficult to meet the reality, but from the perspective of the valuation results, the real option valuation method is better than the market method and income law.

4. Suggestions on Valuation of New Economy Enterprises

4.1. Choose a Suitable Valuation Method

In addition to the cost method, income method, real option method, etc. listed above, there are many methods for corporate valuation. New economy companies cannot copy their past applications due to their short history, fast growth, new business models, and high market expectations. The experience of the valuation method should be combined with its own actual situation, fully considering the applicability of the valuation method, and choosing a suitable method. For example, when the company's cash flow is negative and the future value is highly uncertain, the cash flow discount method cannot be used; the price-to-earnings ratio or the price-to-book ratio is not suitable for the valuation of new economic companies with negative net profits; The scope of application of options is just the opposite of the discounted cash flow method; in addition, on the basis of each method choice, it can be combined with the characteristics of new economic enterprises, such as the number of clicks by Internet companies, the development cycle of new drugs in the pharmaceutical industry, the download volume of e-commerce APP and users The number of people, etc., studies the development potential and expected earnings of the company, and revises the data used in the valuation to improve the valuation quality of the new economy company.

4.2. Gao Analyzes from the Perspective of Future Growth

The historical financial data of high-growth new-economy companies are often misleading. We should not only look at the assets and liabilities of their financial statements, but also consider their future growth. Take Pinduoduo, a high-growth new economy enterprise as an example. Whether it is from his tens of billions of subsidies or strategic marketing (duoduo orchards, kacha kacha money a little, etc.), they are all to achieve the goal of publicity and better seize Market, increase the number of users. Once you have seized most of the market and have an absolute number of loyal users, huge profits will beckon you. Meituan, which has been working hard for 10 years, has only turned losses into profits in recent years. Therefore, in the process of valuation, we should be able to foresee what the industry and the company will look like when the company develops from high growth and instability at present to sustainable and medium growth rate in the future? Then, according to the current performance status, a retrospective calculation is performed.

We can use some non-financial indicators to measure corporate performance, such as market penetration, average revenue per customer, and clicks. The actual value of an enterprise can be judged by the size of the core factors that affect the value of the industry. For example, compare the download volume and user number of pinduoduo and meituan app with other enterprises in the industry (Taobao, Ele.me Takeout) to measure the development potential of this enterprise.

4.3. Combine Multiple Valuation Models

Each value evaluation method has its own scope of application, and has its limitations when applied to the value evaluation of new economy enterprises, and it is difficult to make accurate estimates. We can combine the business cycle and profitability of the enterprise to calculate the valuation results which are closer to the actual situation by combining a variety of appropriate valuation methods, and provide investors with reference and assistance. For example, the discounted cash flow method is used to evaluate the value of the existing business, and the option pricing model is used to evaluate the potential value. The two valuation results are multiplied by reasonable weights, and the sum of the two results is the actual value of the new economy enterprise.

References

- [1] Huang Wei. Discussion on the valuation of new economy enterprises [J]. China asset appraisal, 2019 (05): 38-42.
- [2] Huang Shizhong. Analytical framework of the new economy enterprise valuation myth [J]. Business accounting, 2020 (03): 4-7.
- [3] Zhu Lei. Research on the improvement of Internet enterprise value evaluation method [J]. China forestry economy, 2019 (05): 80-81 + 86.
- [4] Song Feifei. Analysis of the value evaluation method of network companies [J]. Business economics, 2015 (01): 85-86 + 110.
- [5] Lou Chaohui, Jiang Lijun, Yu Chunxiao. Valuation methods of Internet enterprises: a review [J]. Journal of Hangzhou municipal Party school, 2020 (02): 88-96.
- [6] Li Zhenzhen. Analysis of valuation evaluation of Unicorn enterprises in the new economic era [J]. Bohai rim economic outlook, 2018 (12): 51-52.