

## Research on the Evaluation of Internet Company

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**Abstract:** Along with information technology and network technology's development and popularization, internet company came in being. And at the same time we have to face a new problem-the evaluation of the internet company. Because of its new characteristic, we can not use the conventional methods, while it is also a form of the general business enterprise, we should consider traditional financial indicators as well. This thesis raised a number of views on this issue to better evaluate the internet company. [The Journal of American Science. 2007;3(1):13-17]

**Keywords:** internet company; discounted cash flow techniques; discount rate

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### 1. INTRODUCTION

As the development of the Internet many related industries developed rapidly, and many economists would call a new industrial revolution. The internet company is one of them. Its rapid development has been proven in the Nasdaq market. The myth that created by Yahoo, America Online, Amazon network companies in the U.S. Nasdaq market has moved many people. In 2000, China's three major portal, Sina, Sohu, Netease came into the U.S. capital market, and nest is bidu in 2005. what make people exciting is that the first day of listing on the stock its price raise from 27 dollars to 120 dollars, and the increase of 354% also created the highest growth in the U.S. stock market over the past five years. Its such achievements are attributable to the concept of internet company.

Because of its extraordinary development many people have raised doubts that this is a bubble, and thus raises the discussion that how to accurately determine the value of the internet company. There are many different between the internet company and traditional industries, it faces more trade risk, more pressure of purchase and recombination. In such cases, the research of evaluation of internet company has entered a new stage, and many specific methodology came into being. But from an overall point of view these methods often come to the conclusions with partial analysis, and often neglect the content of the value of the internet company. So it is urgent for us to make systematic research and put forward a reasonable method.

### 2. THE SHORTCOMINGS OF EVALUATION METHOD OF INTERNET COMPANY

Customarily, there are three traditional methods to evaluate: income approach, market method, option evaluation method.

#### 2.1 Income Approach

The main method of income approach is discounted cash flow techniques. The basic discipline of discounted cash flow techniques is the principles of increment cash flow and time value. That is to say the value of any assets is the present value of the future cash flow that it produced.

Because of its generally accepted theories foundation and extensively applied realms the cash flow techniques have been the particularly worship in the academic circles. But at the time of carrying on it to the evaluate the current the internet company, the cash flow techniques met the very big difficulty. First, most internet company have no earnings currently, and the enterprise finance information have little the worth. So the investor can't in the usual way to predict the future cash to flow with his history accomplishment. At the same time, because of the indetermination of the internet company's future development, there are more difficulties to use the discounted cash flow techniques. Exist development and the ability of getting profit is the company's comprehensive ability, and this ability can be seen from the cash flow that the company pro-

duced in the future and the time it get. Therefore, the foundation of discounted cash flow techniques - the value of any assets is the present value of the future cash flow that it produced.' has become a justice. Therefore, we can consider another kind of possibility: there are problem when we use discounted cash flow techniques to evaluate internet company.

In addition the EVA method is subjected to the method for worship in recent years. EVA( the economic value added), namely the economy increment value, was also translate for the economic profits( the economic income), its basic thought is: If the EBIT is equal to the request income of the creditor and the shareholder request, namely the economic profits is zero, then the value of the company did not increase, and also did not reduce, still be equal to the investment capital.

The accuracy of the model is decided by the accuracy of the weighted average capital cost to a large extent. But our stock market so far is in the early years. There are more speculated than investment. This serious influence adds the calculation of weighted average capital cost.

## 2.2 Market Method

The traditional P/E method is a popular method in market method. P/E method is a kind of covariance ratio that keeps the stoke price and the combines with the current business enterprise or company performance condition together.  $P/E = \text{price/earning per share}$ . The model is: value per share of target company = compared company average  $P/E * \text{earning per share of target company}$ .

But it has the very serious problem in use process. In this model, if the investor confidence on the development of that profession, so the P/E rate of this profession would be higher, vice versa. And on the other hand, this is also the weakness place of this model. When the stock price of some profession appears the system error, we also have no P/E rate of business enterprise that can compare. The internet company is belonging to this kind of circumstance.

## 2.3 Option Evaluation Method

A lot of characters of the internet company make it is very suitable to use option evaluation method. For example, The internet company has the very high in determination and risk, so we can use postpone option and abandon option; the internet company generally has a threshold limit value, when break it, the company will have the very strong exterior and can have the

huge profit, so the it can use the expand option, increase option etc.

The characteristics of the internet company make the option evaluation method is very suitable. Even someone think in the network economic ages, option evaluation method is the basic method to find investment opportunity.

Many characteristics of Internet Company make it very suitable to apply practicality option pricing method into evaluation. For instance, Internet Company has the very high uncertainty and risk and may use option of surrender. Internet Company faces a critical value, and enterprise will normally have the successively decrease of very strong external and effectiveness that increases progressively sex and becomes wood and begins prison advantage., after the breakthrough critical value afterwards. Enterprise may use extend option, contraction option and abandonment option according to the development. So the characteristic of Internet Company decides the application of the practicality option pricing method in the evaluation. Someone even think that the practicality option pricing method is a basic way to find choice for investment in Network Economic Era.

Although the option price model is widely used in the evaluation of Internet Company, it still has many drawbacks. The first one is that assuring which practicality option a company owns is not easy. Secondly, it is also difficult to assure the factors of the price of the real purchase option. The third one is the complexity of the very realistic option complexity. The most important point is that the real purchase option. One important point is that a prerequisite of the model is a perfect condition, which is impossible to reach.

## 2.4 The New Method of Internet Company Evaluation

A main reason of traditional method can not work is that internet company have some special index, such as register number, page to browse rate etc. And the new methods more consider these index. But because of their short existing time and need to be inspection by practice there are also some problems.

### 2.4.1 Neglect the finance index

The new method often adopts the form of the ratio quotation method and join the special evaluation index such as click rate. In this way to explain the special of the internet company, but it also exists the problem that can't dissolve. For example the ratio quotation method usually need to be a mature of value valuation system, otherwise it is very difficult to give a reason-

able conclusion. Currently the internet company belongs to this kind of circumstance. Under the condition of widespread upsurge of the network stock price, explaining one with the other's price will cause the question.

#### **2.4.2 Neglect worth content of the internet company**

A kind of tendency of "the attention is highest" will see at evaluating the internet company. The attention to the internet company is important, but there are still more important thing than attention, that is the earnings. Because the internet company is also one kind of the company. It has no the differentiation with traditional business enterprise on the purpose of the earnings. The different just is that it changes the profitable means.

#### **2.4.3 Neglect to analyze a single business**

The new method is always making the whole growth space of network profession as the decision factor of evaluating a single business. For most internet company, the infinite of cyberspace and the small obstacle to enter will attract more rivals to join to this profession. The result is the growth space would be quickly erode by the new entrant. If an enterprise wants to maintain the market foundation of the oneself, it must always ready to fight. So when we do the evaluation, we should carry on more analysis on the enterprise we are evaluating, and in this way we can get the credibility conclusion.

### **3. THE IMPROVEMENT OF THE METHODS OF THE EVALUATION OF THE INTERNET COMPANY**

Through the above chapters' research on the characteristics of the development of the evaluation of the Internet Company and the prevail methods of the evaluation of the Internet Company, it can be concluded that not only the new methods of evaluation, which take account of the characteristics of Internet Company, but also the traditional theories can not estimate the Internet Company fully and accurately. For the new methods, some indexes, such as click rates, are always emphasized, but the fact that as a company, Internet Company also need other supports, such as profit, cash flow, and so on is always neglected. Only can the companies that really get profit give money to shareholders and further develop in the long run. Although the traditional methods have perfect theoretical basis, they still need some improvement in order to more suitable to the new characteristics of Internet Company before applied to the evaluation of the Inter-

net Company. This issue would improve the traditional ways of estimation based on these concepts. Among these methods, discounted cash flow technique is one of the methods which has the most perfect theoretical basis and is more suitable for improvement.

### **3.1 The Feasibility Analysis of Discounted Cash Flow Technique**

#### **3.1.1 The importance of cash flow**

Cash flow is the most important element for company's existence and development. The company without adequate cash flow would be bankrupt. The Internet Company could not be admitted if it always do not have profit no matter how high the click rate is. When people reread the disciplines of the evaluation of the Internet Company, it is achieved that the real essence of the company's value is its ability of getting future profit, both for traditional companies and Internet Companies, for annexing companies and managing the value of companies. A company is admitted by market only when it has the abilities.

#### **3.1.2 The objectivity of cash flow**

Discounted cash flow technique requires full information, not part of the Internet Company, and is based on the long run not the short period. It estimates the company's consistent value, not the recent profit or cash flow. It is a great contribution of discounted cash flow technique to the concept of stock investment. It can explain why some companies can not effectively rise the stock price by improving profit in a short period and sacrificing cash flow in the long run. For example, reducing the research fees may impact the further profit and develop new profitable products, although it can increase profit and cash flow in a short period. But the market only grants these Internet Company with high research fees high P/E.

#### **3.1.3 The evaluation of the Internet Company introduce the conception of hazard to evaluation**

Any company has various levels of hazard in its investment, financing and producing, which is also reflected in the evaluation of company, especially in Internet Company. It needs to input a large amount of cash at the beginning of the development of Internet Company. The following competition is always crucial, and it is always appear that the stronger always win, which can be seen from the combination of the Internet Company nowadays. To this extent, Internet Company has more hazard than traditional company, which is taken into consideration in discounted cash flow technique. It well reflects the real situation of Internet

Company by applying different rates to different companies, which is not reflected by other techniques.

### 3.2 The Amendment of Discounted Cash Flow Technique

#### 3.2.1 *the amendment of cash flow*

From the above discussion, it can be seen that one of problems confronting us of discounted cash flow technique is the negative cash flow of Internet Company. It needs to input a large amount of funds for the construction of web at the beginning of the Internet Company, in order to gain high click rate by offering many free services and then gain the resource of faithfully customers. Only with these resources of faithfully customers, can the Internet Company survive in the competition and finally bring profit to the Internet Company, which can not be seen at the beginning of construction and people can only see the negative cash flow. The negative cash flow can not be estimated in discounted cash flow technique. However, the technique can be revised if we reread the theoretical basis of discounted cash flow technique.

The basic discipline of discounted cash flow technique is the time value and adding cash flow. In other words, the value of any assets, including company or stock, is the present value of the future cash flow. If the company can produce positive cash flow in the future, it is worth to exist. Estimating its value is also its future cash flow, not recent negative cash flow. So the company's value can be got if the model is modified in some extent. The modification of this issue is based on these considerations.

The development of Internet Company is depended on its own intangible asset. The custom base, an important intangible asset of Internet Company, is a critical element of Internet Company's value because the value of the company's custom base has a characteristic of extension. The company is able to establish new commercial model once the Internet Company establish a good custom base and possess stable customer base. For instance, Sina and Sohu have their own electrical retail sales. One invisible fact is that the Internet Company with stable custom base has apparent advantage on extending its own work scope. Most of these companies can develop their own new suitable commercial model according to the characteristics of recent owned customers. Former webs can develop in other fields and former professional webs can fully widen product types in their own fields. It only needs to find suitable commercial model and transfer the intangible custom base to real combinations. These important custom bases push the Internet Company

forward. So these values ought to be added into the evaluation of the Internet Company.

It is considered in the issue that the investment which is used to widen custom resource should be capitalized and amortized like other asserts. It can not only avoid the negative cash flow at the beginning of establishment but also more suit for Internet Company.

The amendment in this paper is that the research fund, development fee, advertisement fees, and marketing fees that are formed before the high developing period should be dealt with as an asset, and amortized in five years.

#### 3.2.2 *The improvement to the discounted rate*

The Capital Asset Pricing Model (CAPM) is a wide accepted method of affirming discounted rate. CAPM refers to that the capital share cost is equal to risk-free interest rate adds linear function which is measured by systemic risk time and Risk Premium for stocks. System risk is the susceptibility that compares the profit of the no risk interest rate of studied bonds with the above average profit of the market that has no risk interest, which is measured with covariance. Beta is the measuring unit, which is got by the regressive calculation of the profit of the specifying portfolios with the market index. CAPM only decides the systematic risk of demanding yield, because the not systemic risk is eliminated by holding various portfolios theoretically.

The test of CAPM shows that this model can not completely explain the profit of the market, especially the specific high risk of Internet Company. It is considered that there should be an amendment of the model. It adds an element, the specific risk of the company, to the amended model. The modified model is as follows.

$$E(R_i) = R_f + \beta_i[E(R_m) - R_f] + RP_U$$

In the above model,  $RP_U$  is the risk premium. The yield to maturity of treasury notes can be used as the risk-free interest rate. The specific risk of the company is affirmed by subjective judgment, which is based on the analysis of the characteristics of the company. The systemic risk can not entirely measure the risk of Internet Company, which belongs to high risk field, because the specific risk of Internet Company is added to the model. The statistics shows that the systemic risk is about tow thirds of the total risk, while anti systemic risk is about one third in our country. Like above analysis of the cash flow, it can be seen that the cash

flow of Internet Company is different in different periods, so the discounted rate should be modified according to the profit and affirmed differently in different periods. The measurement of risk premium and systemic risk is fixation, but it is quite different in different periods for the specific risk of the Internet Company. If the modulus  $\mu$  is added to the specific risk of the company, the beginning is the most risky period of Internet Company. The huge input of fund and fury competition makes the Internet Company. have the highest risk. The modulus  $\mu$  is set 1, and according to the analysis of the anti systemic risk in the three periods and the cause of formation, the ratio of risk is about 3:2:1. The discounted rate is accurately acquired by the above modification.

#### 4. CONCLUSION

As a new-born thing in its development it has experienced adjustment and twist. In the development process of the internet company, there are violently compete and huge risk. In the early years, they always face to be annex by force and bankrupt danger, but once entered its high speed develop stage, it will get huge profits. The high-speed development of the internet company is decided by its customer number which is also so-called "attention economy". These characters all make it different with tradition economy, so its value valuation also put forward a series problem for us. The traditional method neglected its new characteristics, and newly arisen methods forgot it is also a kind of business enterprise, and do not consider its finance index. By the analysis of these phenomenons, this text put forward the method that improves the discounted cash flow techniques to evaluate the internet company. To the cash flow before the company come to the high speed stage, some expenses such as research, marketing and advertising should be consider as a asses and be amortization. For the discounted rate this text put the particular company risk to the CAPM, in this way to get the high risk characteristic of internet company. Through these

Through these improvements, we can evaluate the internet company better and get accurate conclusion.

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