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The Value Investment Analysis of Alibaba

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Abstract. This paper adopts two models of value investment to estimate the situation of Alibaba. As a newly listed company, many people is not clear about its value investment. Therefore, the paper mainly aims at providing a reference for estimating the value investment of Alibaba. The results of four models in this article show that Alibaba is a company worthy of investment. However, it may be confronted with risks without a useful solution to the potential risks.

1. Introduction

Value investment is a significant form of investment in stock market. And there are numerous in-depth discussions among scholars on the topic of value investment. Benjamin Graham and David Dodd discussed the significance of value investment. Based on it, Philips. A. Fisher further developed the evaluation criteria for enterprise value investment. There has been a relatively complete system in the theoretical study of value investment. Some scholars tried to explore the investment value of some industries and enterprises in the context of the value investment theory. As Alibaba is a newly listed company, the theory is not well-suited to its analysis. Therefore, in this paper, we will look at value investment by incorporating other models apart the value investment theory .

Next, findings by some scholars are discussed through theoretical analysis. The Alibaba will be taken as an example for empirical analysis of value investment. Despite defects of FECE model and Book value model, they are quite helpful tools in certain aspects. So, they are cited in this paper. In order to make up for shortcomings of FECE model and Book value model, PE and PB model are introduced to obtain more objective results.

According to the results, except the Book value model, all the other models show that Alibaba is a company worthy of investment along long-term risks.

2.Theoretical analysis

The theory of stock value investment was first systematically elaborated in 1934 by Benjamin Graham and David Dodd in Security Analysis. In this book, the authors distinguished between investing and speculation. A person's value orientation determines his investment behavior in the stock market. Graham proposed the theory of investment valuation, that is, buying stocks at a price less than 2/3 of the net asset value as the stock would retain its value in the future. The fundamental principle of investing is not to lose money. In this way, the concept of margin of safety is further introduced, which is applied in buying stocks at a price below its intrinsic value in order to minimize possible losses.

Philips·A·Fisher had a unique understanding on value investment based on theories proposed by Benjamin. Compared with Graham who preferred undervalued but quality stocks, Fisher argues that a better option would be to purchase moderately-priced stocks with the possibility of long-term high speed growth rate[1]. If a stock has a high price and a high growth rate, it is worth holding. There are two major rules to evaluate the capacity for growth. First, corporate culture, including enterprise strategy, management structure and management philosophy. Second, long-term demand for the products. Fisher combined security with growth to broaden the concept of value investment and the scope of value investment. The investment should be based on the development of the enterprise.

The share value of the corporation may not necessarily go along with changes in the value or assessment of the firm. Value investors need some space for estimation error, and there is the need to

establish their own "security threshold" depending on the specific risk sensitivity [2]. The concept of the safety, one of the considerations behind value investment, is based on such an understanding that purchasing securities at a lower price provides value investors a better opportunity to obtain huge profits once they sell the securities [3].

Value investors have several conflicting attributes— they could go against trends. They might also ignore reasonable assumption about the economy do nothing while everyone is purchasing while they purchase or retain when everyone else sells [4]. Value investors do not buy trendy stocks (because such stocks are usually overvalued).

In exchange for medium-term purchase and retention of the shares, shareholders can indeed be handsomely compensated [5]. Once stocks are undervalued, a lower proportion of cheap or discounted inventory is available in the derivatives market. Professional investors are always hoping to take advantage of what's perceived as heavily discounted stocks.

3.Empirical analysis

In this part, relative valuation model and the absolute valuation model will be used to analyze the value investment from the perspective of Alibaba - the leading firm in the e-commerce industry in the medium and long run.
The stock value investment model choice:

3.1 Absolute valuation model: FECE model and Book value model

The absolute valuation model is used to measure the total value of an enterprise. There are two main factors, namely net cash flow from operations and production and discount rate. Net cash flow can reflect the overall situation of a company, including quality of service and management. The discount rate is the discounted present value of future income. The growth of cash flow can be divided into three periods. The first stage is the growing period. The second one is transitional period. Finally, the stabilization period. The discount rate could be used to discount the cash flow to current stock value. Obtaining the cash flow of a company requires a deep understanding of the business characteristics of the company to get an accurate estimate. However, this approach has its drawbacks. Because the company could be at different stages of development, cash flow may vary and fluctuate. Considering this situation, we can use the analogy method to evaluate the value by comparing with similar enterprises.

The book value is used to measure real assets of the enterprise and the net asset per share. As Tobin' s Q goes, when:

$$\begin{cases} \dfrac{Bookvalue}{Stockvalue} > 1 \text{ , undervalued, Buying} \\ \dfrac{Bookvalue}{Stockvalue} = 1 \text{, Buying or not} \\ \dfrac{Bookvalue}{Stockvalue} < 1 \text{, Bubble economy, No buying} \end{cases}$$

Like cash flow, this model has its drawbacks. It is suitable for evaluating companies with heavy assets. For companies strong in soft power, such as brand reputation and patents, this approach is not applicable As it has fewer tangible assets than other companies.

3.2 Relative valuation model: PB model, PE model

This paper takes the enterprises of the same scale from the same industry as the reference and adopts the relative value model to make horizontal value comparison. In this way, we could get an approximate range. There are two models in the relative valuation model: PB and PE.

PE model:

$$PE = \frac{Share\,\mathrm{Pr}\,ice}{NetM\,\mathrm{arg}\,in}$$

PE is an essential reference index to evaluate the range of stock prices. In general, P/E between 15 and 30 times is a rational range while PE exceeding this threshold indicate greater potential risks of the company shares. Any instability of the market could lead to sharp fluctuations of the stock price.

PB model:

$$PB = \frac{Share\mathrm{Pr}\,ice}{NetAsset}$$

This is a ratio that measures the virtual and physical value of a company. It is the index that measures the deviation degree of enterprise' s entity value and virtual value. A high numerical value means that the company is bubbling. At this point, measures are necessary to intervene in the process to pretend potential risks. The value is easy to calculate. PB is an important reference index to measure asset risk.

3.3 Value investment model with Alibaba as an example

3.3.1 Overview of Alibaba

Alibaba went public in the US in September 2014. The stock symbol is "BABA". Alibaba has been expanding ever since. On September 6, 2019, Alibaba group announced the wholly-owned acquisition of NetEase Koala.com for US $2 billion, raising US $7 billion for the company. Among China's top 500 service companies in 2019, Alibaba group ranked 24th in the list.

Figure 1 was an overview of Alibaba's operation with data of the fourth season after listing in the US.

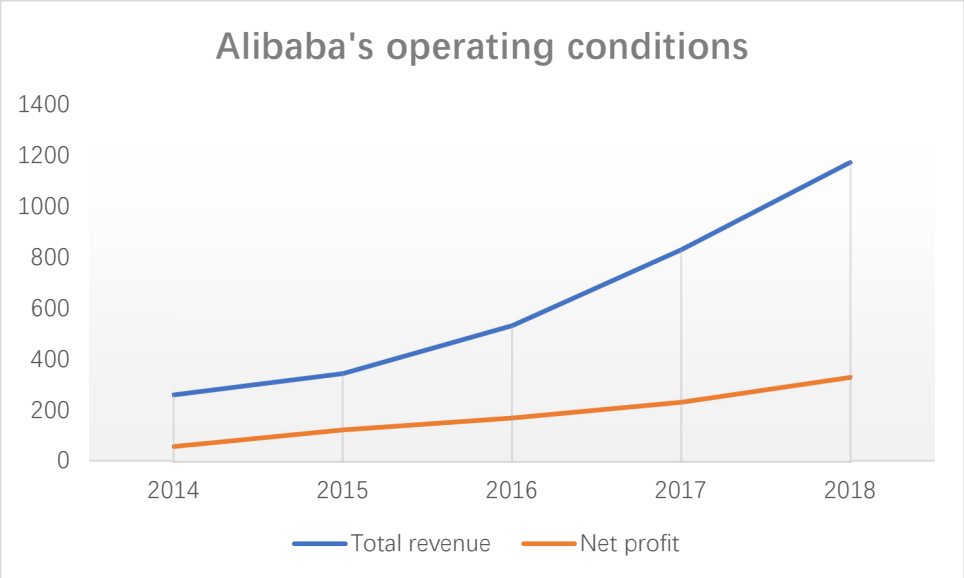

Figure 1 Alibaba's operating conditions

Data resource: https://www.alibabagroup.com/cn/global/home

The figure shows that Alibaba is keeping a strong momentum, where both revenues and net profits are growing. Since the period is relatively short, the impact of inflation can be ignored. The profitability of Alibaba maintained a relatively stable and rising trend. The range of Alibaba's business has expanded from a single e-commerce sales platform into a large web service provider, including financial network, transportation, big data cloud computing services, advertising, cross-

boundary trade services, etc. Alibaba has kept an edge in the e-commerce industry, allowing constant and stable development of the firm.

3.3.2 Analysis of e-commerce industry

Global e-commerce is on the rise. In 2017, global online retail sales totaled US $2,304 trillion, an increase of 24.8 percent from 2016. Global retail sales totaled $22.640 trillion in 2017, an increase of 5.8 percent from 2016. In 2017, online shopping accounted for 10.2 percent of global retail sales, up from 8.6 percent in 2016.Online customers have various preferences based on the region they come form, where customers from South Korea feature the top buyers, followed by UK, Denmark and China.

Recently, e-business start-up from more than 60 countries have been financed by investment firms. India, the United States and China are the world's biggest market of global investment, accounting for 30%, 24% and 17% respectively. Based on the trading frequency of investment, the United States is the most active player, accounting for 47% of the total global trade while India came in second, accounting for 12%.

3.3.3 Value investment assessment

Firstly, the FCFE model was selected for absolute valuation analysis of Alibaba's value investment. The book value doesn't work for this purpose because Alibaba is not a heavy asset company. It mainly relies on computer network service, making it a firm majoring in light assets. However, book value is still adopted to assist analysis. The chart of cash flow of Alibaba is shown in Chart 1.

Chart 1 Cash flow of Alibaba

Chart 2 Cash flow of Alibaba Unit: a hundred million usd	To 2019-03-31	To 2018-03-31	To 2017-03-31	To 2016-03-31
Net Earning	119.55	92.66	61.27	112.09
Working Capital	176.9	155.55	108.59	77.11
Operational cash flow	224.95	189.84	119.38	89.37
Financing cash flow	-23.99	29.02	46.68	-25
Exchange rate influence	4.84	-9.15	3.03	0.73
Net cash flow	-6.31	84.82	54.19	-3.33
Free cash flow	150.98	144.82	93.3	72.31

Data resource: https://www.alibabagroup.com/cn/global/home

Chart 1 shows that the operational cash flow kept growing after 2016, indicating stable operation and daily production of the company. What's more, of the company is expanding into other fields. Financing cash flow and the net cash flow are different from the operational cash flow. It is shown that the company still have problems in financing. Meanwhile, investment capacity is unstable and weak. Free cash flow can be described as the income that remains after costs are incurred, such as operating cost as well as major acquisitions known as capital expenses, i.e. the purchase of assets such as machinery or transformation of production facilities [6].

Then, the paper value model is used for further analysis. Chart 2 is the balance sheet, where book value per share is shown in the chart.

Chart 2 Book value per share

Unit: a hundred million usd	To 2019-03-31	To 2018-03-31	To 2017-03-31	To 2016-03-31
Current assets	399.22	405.63	262.49	205.83
Non-current assets	1,036.94	734.42	472.98	357.94
Total assets	1,436.16	1,140.05	735.48	563.77
Current liabilities	309.02	215.86	136.06	80.46
Non-current liability	211.31	225.5	129.02	96.67
Long-term debt	166.41	189.97	111.49	82.67
Total liabilities	520.33	441.35	265.08	177.13
Total equity	915.82	698.7	470.39	386.64
Book value per share	28.32	22.62	16	13.57
Book value per share - tangible	9.15	10.9	7.99	8.13

Data resource:http://quotes.sina.com.cn/usstock/hq/balance.php?s=baba&t=annual

Clearly, assets are growing over time while the debt of the firm is also on the rise. The liabilities total 520.33 hundred million dollar in 2019 and 17.713 billion dollar in 2016, almost tripled over the past three years. The upside is that Alibaba is operating on a greater scale while the downside it may be confronted with more risks because of accumulated debts.

Then, the PE and PB models were applied. Based on the data of Alibaba on October 5th 2019, the PE of Alibaba was 26.89. Amazon, a company from the same industry, was 72.17while Ebay was 14.81. The PE is kept within a reasonable range. The PB of Alibaba was 5.70, while Amazon was 16.06 and Ebay 7.87. Therefore, the PB of Alibaba was still at a low level.

4.Discussion

The PE and PB level shows that Alibaba is priced at a rational level. But there is an outiler in the book value model. As we discussed earlier, Alibaba is an Internet company, featuring light assets. Therefore, the book value model is not a perfect tool for analysis. So, Investors need to carefully assess Alibaba' s prospects and keep an eye on the latest developments. For Alibaba itself, it should be noted for its relatively heavy debt and cash flow. Alibaba should be aware of potential financial risks.

5.Conclusion

The paper discusses the value investment of Alibaba. The absolute value and relative value model were applied. The results of empirical analysis show that Alibaba is still a stock worthy of investment. But there is a risk of bubble and interventions are needed before there is a problem. This paper also has room for improvement. The evaluation model is oversimplified, so there are potential factors that were not taken into consideration, compromising accuracy of the results. More exploration needs to be done in terms in the future.

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