



温州肯恩大学  
WENZHOU-KEAN UNIVERSITY

**Factors that Impact the Initial Public Offering Market of  
the Special Purpose Acquisition Company**

In Partial Fulfillment of the Requirements  
for the Bachelor of Science in Finance

by

ZHENG, Liyi

1098207

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## **Abstract**

Due to the dissemination of the coronavirus, the implementation of the segregation policy is not conducive to the operation of the traditional IPOs. Starting from the end of 2019, a technic named “special purpose acquisition company” (SPAC) become popular in the investment market. This paper will mainly focus on testing the factors including the overall market, regulation, and the epidemic situation impact on the performance of the SPAC IPO market. The test will consist of two parts. In the first part, I need to collect the number of SPAC IPOs in the U.S. market, the federal fund rate & 10-year treasury rate, and the number of new infections in the U.S. Then analyze the relationship between the SPAC IPOs and these factors. In the second part, I will test whether the valuation model “EV/EBITDA” could serve as a reliable technic in evaluating the SPAC target company, and the comparison between valuation of the SPAC target company with the overall industries.

Keywords: Special Purpose Acquisition Company (SPAC), initial public offering (IPO), regulations, merger and acquisition (M&A), COVID-19, M&A multiple.

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## **1 Introduction**

The special purpose acquisition company (SPAC) is a kind of shell company with a long history. It appeared in the 1990s, but it only had sprung up in 2003 and kept silent until the end of 2019. The earliest research appears in 2007 and mainly focuses on the operation model of SPAC and its history because the SPAC does not act popular enough to attract researchers. Riemer (2007) mainly discusses the relationship between SPAC and the blank check company, which is the SPAC's predecessor and delves into the origin of the SPAC.

At the end of 2019, the SPAC experienced a resurgence because of the epidemic. In 2020 and 2021, the SPAC IPOs occupied 46% and 52% of the whole IPO market in the U.S.(SPAC Analytics, 2021), which shows the boom of the SPAC IPO market. The model of SPAC and traditional IPO are different, especially the SPAC IPO and De-SPAC take less time than the traditional IPO process. For the company that wants to list on the market, they need to hold a roadshow and nearly one year to finish the whole process. During the pandemic, it is difficult for those companies to organize the roadshow because the policy of quarantine and the eruption of the epidemic is unpredictable. The SPAC could avoid such problem because, for the companies that choose SPAC, those SPACs have already accomplished the long-winded conventional IPO process, so the De-SPAC could help companies save time and reduce the cost.

With the rebirth of the SPAC market, more and more research is being done on this area, since the SPAC is derived from the blank check company, the supervision requirements on SPAC are also becoming more comprehensive than before. Newman and Trautman (2021) detailly discussed the regulation on SPAC and the SEC's policy change of the SPAC market after its resurgence. Additionally, Bai, Ma, and Zheng (2020) test the short-term performance between companies that list on the stock market through conventional IPO and De-SPAC and conclude that the SPAC performs well than the conventional IPO company in the short-term.

While Kolb and Tykvova (2016) find that the SPAC does not perform well in the long-term compared with the conventional IPO companies. Both of these two researches focus on the macroscopic angle and make some comparisons between the SPAC and conventional IPO, but there is still some blank areas in the research on the performance of SPAC IPO market. The first part of this paper will mainly focus on testing the factors that impact the SPAC IPO market, and the three factors are overall market condition, the regulation, and the pandemic situation. By doing some simple regression analysis, the relationship between those factors and the SPAC IPO market could become remarkable.

Except for the comparison between SPAC and the traditional IPO, the whole process of SPAC also attracts researchers' attention. It is a complicated process from SPAC IPO to De-SPAC, Gahng, Ritter, and Zhang (2021) analyze the motivation for some companies to go public through SPAC. They test the returns for investors on common shares and on warrants. Agarwal (2021) analyzes the overall valuation of the target companies in the SPAC market and finds that the valuation is at a high level in these two years acquisition process.

As Agarwal (2021) mentions, the valuation of the target company is a conundrum for most investors, so it is important for the investors to find a commonly used and reliable way to evaluate the company. Fernandez (2007) delves into six main valuation methods for enterprises and discusses the different properties of these methods. Among these methods, Mauboussin (2018) detailly studies the EV/EBITDA model and discusses the pros and cons of this method, like the elimination of the impact of different tax rates. Theoretically, the EV/EBITDA could serve as an effective and general method to evaluate the SPAC target company. In the second part of this paper, from the microscope perspective, the EV/EBITDA method will be tested through a case analysis, and all the data used in this part could be directly found through SEC—company filings.

For the connection between the two parts of this paper, the valuation of the SPAC

target companies reflects the condition of SPAC IPO market, the high valuation of targets reflect the boom of SPAC IPO market, while the low valuation shows the recession of the market. The paper is aimed to verify how do the factors including overall market conditions, policy, and pandemic impact the SPAC IPO market, and testing the valuation model of the target companies.

## **2 Literature review**

### **2.1 Early Study**

Compared with the research on the traditional IPO process, there are fewer academic studies on the special purpose acquisition company (SPAC). Due to the lack of attention by the overall market in the past, the sample size of the SPACs is not big enough to support further research. In the early years before 2010, most of the researchers focus more on a purely mechanical view of the operating mechanics of SPAC and its origins (Griffin, 2019). Riemer (2007) is one of the earliest researchers that notice the SPAC, he arranges a detailed process about how the SPACs borrow the technic from the blank check companies and form their system. As Riemer mentioned, after the enactment of Rule 419, the blank check companies are nearly eliminated from the U.S. market, and some of the managers mostly comply with Rule 419 to create the first generation of SPACs.

### **2.2 New Epoch of SPAC Study**

Nowadays because of the impact of COVID-19, the traditional IPO process does not act as effectively as the SPACs. Comparing with the SPAC, the conventional IPO needs longer time-around nine months to complete, and it also has the roadshow, which is difficult to hold during this grave situation. However, the SPACs could help the investors avoid such problem because the essence of SPAC is an acquisition process. For the target companies, they only need to complete a kind of merger and acquisition (M&A) process but not the whole IPO, and the M&A could be completed within six months.

The SPAC is now experiencing a rebirth in the U.S. market, the number of SPAC IPO and De-SPAC have reached an unprecedented high level since 2019, nearly 70% of U.S. IPO were SPAC IPO in 2021 (Geerken et al, 2021). With the tremendous development in the SPAC market, the research on this area also transferred from only focusing on SPAC itself to the relationship between the SPAC market and some external factors.

### 2.3 Macroscopic Angle

Chong et al (2021) design a comprehensive study of SPAC including the capital structure, market participants, and its management structure. Newman and Trautman (2021) focus on the financial reporting and audition considerations of the SPAC after the boom in the SPAC market in early 2021, because the SEC begin to pay close attention again to the SPAC market, the researchers detailly discuss what regulation changes does the SEC make to have better supervision on SPAC market. Besides, the SPACs outside of the U.S. market also attract researchers' attention. Although SPAC has already appeared in Europe and Asia in the early 2000s, few studies focused on those "sub-SPAC" markets. In recent years, the research on SPAC outside of the U.S. market becomes more. Riva and Provasi (2019) mainly focus on Italy and analyze how the SPAC could serve as an effective tool to meet the needs of the Italian companies, especially the middle and small-sized enterprises. Lai (2021) discusses that since the SPAC market in the U.S. is nearly saturated, many SPACs start turning to Asia. Lai analyzes some potential areas that are more appropriate for getting IPO through SPACs, and he also talks about the elements of risk and the laws for the SPAC in Asia. For some specific countries like China and Korea, the research on SPAC is more abundant than in other places. Shachmurove and Vulcanovic (2017) focus on the Chinese SPACs, and they compare the performance of these Chinese SPAC with the SPACs listed in the U.S. and found Chinese SPACs perform better than the U.S. SPAC.

When analyzing the SPAC, it is difficult to avoid the traditional IPO. Datar, Emm, and Ince (2012) conduct the first research that focuses on the financial and operational performance of SPACs in the long-term, and they find that compare with the coeval companies that choose the traditional IPO process, those firms that chooses SPAC have lower growth opportunities. Later in 2016, Kolb and Tykvova also design the research on testing the long-term abnormal returns of SPACs. Different from the previous one that conduct by

Datar, Emm, and Ince (2012), Kolb and Tykvova expand their timeline from 2011 to 2016, their research including the analysis of 127 SPAC acquisitions and 1128 SPAC IPO events, and they also conclude that the companies go public through SPAC do not perform well in long-term compare with the firms that choose conventional IPO process. Bai, Ma, and Zheng (2020) conduct their research on delving into the short-term performance of SPAC. They conclude that the firms that go public through SPAC are usually small or medium-sized companies, so compared with the traditional IPO firms, those SPACs are riskier during the listing process. However, different from the poor long-term performance, their research shows that in the short-term, the SPAC firms have a similar growth rate or even perform better than the companies that IPO traditionally at the same period.

On the macroscopic angle, the previous research has done a lot about the comparison between the different processes of SPAC and conventional IPO, the SPAC and SEC, and the long-term & short-term performance of SPAC firms. However, there is a lack of study on the relationship between the performance of the SPAC IPO market and the current situation. In order to keep track of this special technic in a general direction, it is significant to analyze and build the relationship between SPAC and the present situation. Due to the COVID-19, the SPAC market not only relates to the condition of the overall market, but also the regulations and the epidemic issue. Besides, it seems like people will live together with the epidemic in the next few years, Passador (2021) forecasts that the SPAC will definitely make some improvements in order to fit in the current and the future market because SPAC has already shown that they could work in the past and get a resurgence in nowadays market, which shows the strength of this technic.

#### **2.4 Microscopic Angle**

It has a long and complicated process from SPAC IPO to De-SPAC, different studies usually focus on different steps. Agarwal (2021) discusses why the SPACs could be attractive

in nowadays market. Expect for making the comparison between SPAC and conventional IPO, he also talks about the incentives of founders, investors, and sponsors. Shachmurove & Vulcanovic (2017) focus on the SPAC IPO and analyze the security issue related to the SPAC IPO process, they mention that the “SPACs’ IPOs are much less noisy”, which means the SPACs do not need to disclose much of their information when listing. Gahng, Ritter, and Zhang (2021) focus on why some companies choose the De-SPAC to get traded on the market. Since the investors could choose either to withdraw the investments or keep investing during the De-SPAC process, it is nearly risk-free for those SPAC investors. Gahng et al (2021) describe the SPAC as “ a pool of cash”, they believe that it is attractive to those target companies, through De-SPAC the target companies could not only get listed but also benefit from the adequate cash flow. Agarwal (2021) also delves into the “valuation conundrum” of the SPAC firms. However, his research mainly focuses on integrating the data and the trading price but does not explain how the SPAC determines the value of the target company. The trading price could directly be found in the S-1 or 8-K forms on SEC, but they do not provide how they calculate the price.

There are some kinds of literature that focus on the factors that impact the performance of SPAC firms from the microscopic angle, and the factors they choose are usually based on the SPAC itself. Hung et al (2021) design a comprehensive study on how the management factors including previous financial experience, education, experience heterogeneity, the age & size of the management team, and ownership of patent impact on the SPAC firms after acquisition. Jokelainen (2021) focuses on the specific case analysis, he chooses five SPAC from 4.1-31.3.2021 and analyzes the factors that impact the return and the trade price. Jokelainen points out that he does not test the relationship between the announcement of the merger and the stock price, which is later conducted by Cohen & Qadan (2021). Cohen & Qadan conclude that the announcement in the merger could have a

significant impact on the share price of SPACs within 60 days.

## **2.5 Valuation Model**

Overall from the microscopic perspective, there are still some blank areas in the research on the valuation of SPAC target companies, due to the epidemic and the quantitative easing policy, there is plenty of cash flow in the market, which make the overall valuation of the target company is at a high level. Since both of the SPACs and target companies do not provide their valuation process, it is necessary to verify how the SPAC firms evaluate the target company and find a common and feasible way to get close to their trading price.

Fernandez (2007) discusses four main groups of the most widely used company valuation methods, and from all these different methods, the EV/EBITDA is the most appropriate one for evaluating the SPAC target companies. Because the EV/EBITDA is more suitable for the company that has predictable cash flow, and it eliminates the impact of different tax rates and capital structure (Mauboussin, 2018). In the SPAC market, since the essence of the SPAC firms is a “pool of cash”, their cash flow is always clear, and the De-SPAC process usually has different companies with different capital structures. Besides, since the SPAC is becoming popular all over the world, sometimes the SPAC and its target company may come from different countries, and the EV/EBITDA could help eliminate the impact of different tax rates.

To sum up, both the performance of the SPAC IPO market and the high valuation of the target companies relate to the current situation including the overall market condition, regulations, and the severity of the epidemic. This paper is aimed to build a relationship between the three factors and the performance of the SPAC IPO market and verify a common way to evaluate the target companies.

### **3 Methodology**

This paper is aimed to find two things: first, the relationship between three factors and the performance of the SPAC IPO market; second, whether the EV/EBITDA could serve as a feasible and reliable way to evaluate the SPAC target company.

#### **3.1 The Impact of Market Factors**

In the first part of this paper, the literature survey and regression analysis will be used in the analysis. The key data included in this part are the yearly number of SPAC IPO number from 2003 to 2021, and it serves as the dependent variable.

In order to analyze the relationship between the SPAC IPO market and the overall market condition, the federal fund rate, and the 10-year U.S. treasury rate are chosen as the independent variables, because the federal fund rate is one of the most important indices of the market, and the 10-year treasury rate is the benchmark of some other rate as the mortgage rate. The SPAC market does not perform actively enough before 2019, the monthly data cannot be used because for many months, the SPAC IPO number is zero, so when analyzing the relationship of these two things, the interval is in yearly units.

The polynomial regression model is used in this part, which aimed to find how the overall market condition impact on the SPAC IPO market and which kind of index is more significant in this case. The SPAC IPO number is the dependent variable and federal fund rate as well as 10-year treasury rate are the independent variables, the discount rate, 1-year treasury rate and 5-year treasury rate are the control variables in this regression model. Because the life cycle of a SPAC is around 2 years, bonds with a maturity of less than five years can influence investors' decisions in this case, so the “2 years” just serve as a kind of “median”, the 1-year/ 5-year rates are chosen.

#### **3.2 The Impact of Policy**

To find an effect of the policy issue, the key is about the regulation on the SPAC

company. Since it is difficult to find or create an index to represent the regulation, and the policies do not contain any measurable variable, it is difficult to do the dummy variable assignment. So in this part the literature survey along with the policy recommendation will be performed.

### **3.3 The impact of Epidemic**

To test the pandemic issue that impacts the SPAC IPO market, the monthly number of new infections need to be collected, from Jan. 2020 to Oct. 2021. The number of new infections together with the monthly number of SPAC IPO, serve as the second set of numbers for analyzing the impact of the epidemic issue. The monthly number of SPAC IPOs cannot be found in one database because most of the available data sources only have the yearly number. It comes from multiple sources including SPAC analytics, Bloomberg, and SPACtrack, and some simple filtration and calculation are required. In this part, a traditional linear regression model is used, and I also take the natural log of the monthly SPAC IPO number to make the result become more significant.

### **3.4 The Valuation Model and Data**

For the second part of the thesis, the mathematic mean is mainly used in this section, and all of the calculation is based on the formula:

$$EV/EBITDA$$

EV (enterprise value) = market value of the company + value of debt – total cashflow

EBITDA = earnings before tax, interest, depreciation, amortization.

Instead of another two wildly used valuation methods P/E and P/S, the EV/EBITDA is the most appropriate mean in evaluating the SPAC target company. Based on the operation of the SPAC, the essence of the SPAC is a shell company, and its unique mission is to acquire a company. The acquisition process may not just be limited to a single country, especially during the pandemic period, the SPAC appears all around the world. The P/E and

P/S cannot avoid the impact of the tax.

EV/EBITDA also includes shareholder' return and creditors' return in EBITDA and contains equity market value and debt market value in EV part. P/E ratio only contains the shareholders' return in "E" and equity market value in "P", without the part of creditors. In other words, the calculation of EV/EBITDA considers different levels of leverage. When acquisition happens, two enterprises with the same profitability may have different financing levels, for the industries with high leverage like the energy industry, EV/EBITDA is more accurate than P/E and P/S.

In this part, the EV/EBITDA will be tested through a case analysis called the Newfrontier's acquisition of United Family Healthcare (UFH). All data come from the SEC, which is the companies' filing because this paper aims to provide a general and accessible way for all the investors to evaluate the target company. From the file named "PREM14A"(a preliminary proxy statement), "DEFM14A"(definitive proxy statement relating to a merger or acquisition), and the "Form S-4".

## 4 Results

### 4.1 The impact of overall market conditions

In this part, the whole process is the unit root test for each variable, the results of regression, and the results of robustness test.

#### 4.1.1 Unit Root Test

Overall there are six variables in this part, to make the result become more significant, I take the natural log of the dependent variable, which means generate  $\ln y = \ln(\text{SPAC IPOs})$ . For the dependent variable, first order difference is performed on the data to make the data become stationary.

The result shows as **Figure 4.1**: Unit root test for the number of SPAC IPO

Dickey-Fuller test for unit root		Number of obs = 17		
		Interpolated Dickey-Fuller		
	Test Statistic	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-4.124	-3.750	-3.000	-2.630
MacKinnon approximate p-value for Z(t) = 0.0009				

For the independent variables, the federal fund rate needs second difference and the 10-year treasury rate need first difference. The results show as figure 4.2 and 4.3:

**Figure 4.2 & Figure 4.3**: Unit root test for independent variables

Dickey-Fuller test for unit root		Number of obs = 16		
		Interpolated Dickey-Fuller		
	Test Statistic	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-3.652	-3.750	-3.000	-2.630
MacKinnon approximate p-value for Z(t) = 0.0048				

Dickey-Fuller test for unit root		Number of obs = 17		
		Interpolated Dickey-Fuller		
	Test Statistic	1% Critical Value	5% Critical Value	10% Critical Value
Z(t)	-4.133	-3.750	-3.000	-2.630

MacKinnon approximate p-value for  $Z(t) = 0.0009$

#### 4.1.2 Result of Regression

To make the result more significant, I take the natural log of the SPAC IPO number.

**Figure 4.4:** The result of the regression on market condition part

SPAC IPOs	Coef.	St.Err	t-value	p-value	Sig.
Fed fund rate	1.190	0.481	2.47	0.029	**
10-year Treasury rate	-1.766	0.584	-3.02	0.011	**
1-year Treasury rate	-0.658	0.403	-1.63	0.128	
5-year Treasury rate	1.262	0.411	3.07	0.010	**
Discount rate	-0.427	0.348	-1.23	0.243	
Mean dependent var	0.220	SD dependent var		1.093	
R-squared	0.564	Number of obs		17.000	
F-test	3.100	Prob > F		0.050	
Akaike crit. (AIC)	46.854	Bayesian crit. (BIC)		51.020	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Although the R-squared is low and shows the insignificant relationship between those variables, the P-Value and t-Value indicates the federal fund rate and 10-year treasury rate have significant impact on SPAC IPO market, the SPAC IPO market has a negative relationship with the overall market condition, and 10-year treasury rate is more significant than federal fund rate.

#### 4.1.3 Robustness Test

Initially the traditional polynomial regression is used, to do the robustness test, I will change the model. Since the sample in this paper is not big enough because the yearly number is used, I choose to change the model to do the test. By using the OLS regression model, although the significance level becomes lower than before, it could still provide the same result as showed below.

**Figure 4.5:** The robustness test result

SPAC IPOs	Coef.	St.Err	t-value	p-value	Sig.
Fed fund rate	1.156	0.517	2.24	0.047	**
10-year Treasury rate	-1.733	0.621	-2.79	0.018	**
1-year Treasury rate	-0.652	0.420	-1.55	0.149	
5-year Treasury rate	1.265	0.428	2.95	0.013	**
Discount rate	-0.406	0.370	-1.10	0.296	

_cons	0.061	0.234	0.26	0.799
Mean dependent var	0.220	SD dependent var		1.093
R-squared	0.548	Number of obs		17.000
F-test	2.663	Prob > F		0.082
Akaike crit. (AIC)	48.750	Bayesian crit. (BIC)		53.749

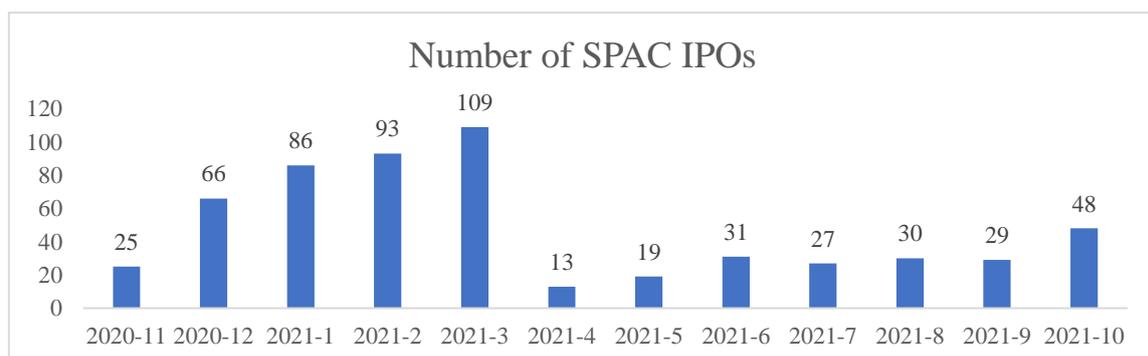
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 4.2 Policy Impact

On April 12, 2021, the SEC issued a series of guidance on SPAC, the most important of which was the need for future SPAC warrants granted to early investors to be documented on its balance sheet in the form of debt rather than equity as originally assumed. Based on the new guidance, all of the SPAC, either lining up to go public or having completed listing and mergers, will need to readjust their statements under the new accounting rules.

In the same month, Reuters published that the U.S. regulator mulls guidance to curb SPAC projections, liability shield sources. For SPAC IPO, the company could make projections on their future performance, which could attract more investors. And the projection is also a significant difference between SPAC IPO and conventional IPO.

**Figure 4.6:** The SPAC IPO market response on policy change.



There is a significant decrease in the number of SPAC IPO in April, notice that the SPAC IPO number kept increasing before April, and reached a peak in March. However, just in April, it decreased from 109 to 13.

## 4.3 Epidemic Impact

**Figure 4.7:** The result of the regression in epidemic part

SPAC IPOs	Coef.	St.Err	t-value	p-value	Sig.
Newinfections	0.000	0.000	3.28	0.004	***
_cons	2.132	0.330	6.45	0.000	***
Mean dependent var	2.916	SD dependent var		1.296	
R-squared	0.350	Number of obs		22.000	
F-test	10.762	Prob > F		0.004	
Akaike crit. (AIC)	67.343	Bayesian crit. (BIC)		69.525	

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

As figure 4.7 shows, the R-squared shows the significance between epidemic issue and SPAC IPO market is low, but the t-value and p-value as well as the coefficient could show the significant positive relationship between the epidemic and SPAC IPO market.

#### 4.4 Results of Valuation

Before the calculation, there is an important statement in the company's Form S-4, which mainly state that some of the financial measures including the adjusted EBITDA, that were not calculated in accordance with the International Financial Reporting Standards as issued by the International Accounting Standards Board.

##### 4.4.1 The calculation

To get the enterprise value (EV), the details of agreements, investments, unredeemed shares are needed. Those items mainly measure the stock value of the company, which refers to the company's market cap. For this specific case, the transaction including two types of agreements—forward purchase agreement and subscription agreement, along with a reinvestment and unredeemed shares commitment. Then refers to the financial statement in 2019 to get the debt, and the debt financing within the transaction should also be included. To get the EBITDA, usually the company filings directly provide this number although it may not be absolutely accurate. The acquisition happened in Nov. 2019, the company's filings provide the EBITDA for 2018, along with forecasts for 2019 and 2020. To get close to the official M&A multiple, the 2019E should be used. And the results along with the comparison

with the official guide price shows as **Figure 4.8:** The results of Valuation

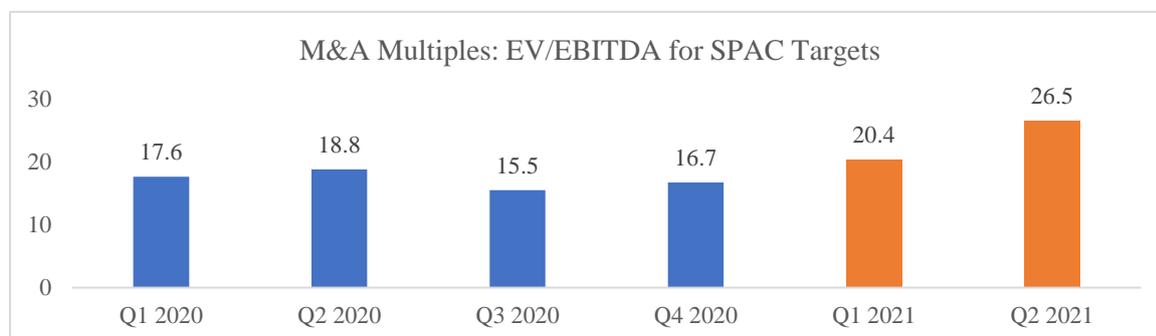
	<b>Official Guide Price</b>	<b>Own</b>
<b>EV</b>	<b>1,302 million (Max)</b>	<b>1,305.8 million</b>
<b>EBITDA</b>	<b>Unknow</b>	<b>20.3 million</b>
<b>M&amp;A Multiple</b>	<b>70.1x</b>	<b>64.4x</b>

\* EV=\$190m (Forward Purchase Agreements) + \$711.5m (Subscription Agreements) + \$167.6m (re-investments) + \$90m (unredeemed shares) + \$26.7m (debt)+\$300(loan) -\$180m (cashflow)= \$1,305.8m

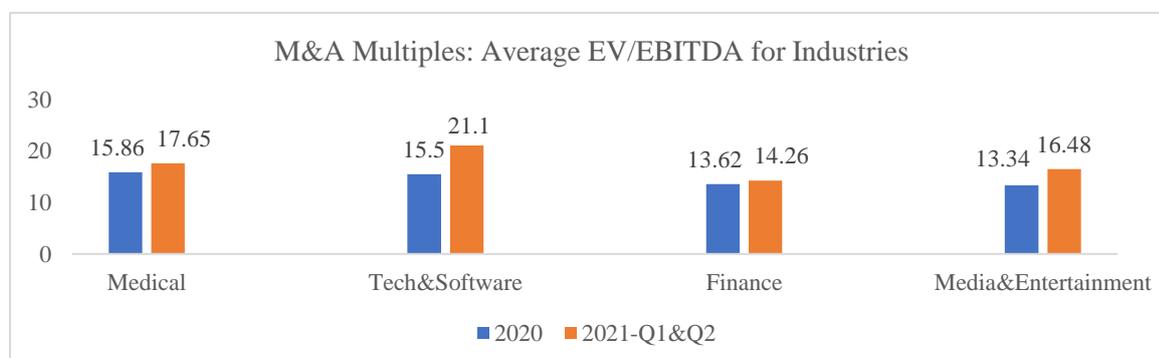
#### 4.1.2 Valuation of the Overall Industry

The case shows the high valuation of the SPAC target company although there is a small discrepancy between my own calculation with the official guidance. The following figures 4.9 and 4.10 show the comparison between the valuation of SPAC target company and the overall industry.

**Figure 4.9:** Valuation of SPAC Targets



**Figure 4.10:** Valuation of overall industries



For the industries I chose including medical, Technology & Software, Finance (including

Fintech), and Media & Entertainment. Because those industries are the most popular industries in SPAC market, more than 90% of the De-SPAC take place within those areas. The results show the valuation of SPAC target companies are always higher than the industries' average level, especially in Q2 2021.

## 5 Conclusion

This paper finds that the performance of SPAC IPO market has a negative relationship with the overall market condition. When the federal fund rate and 10-year treasury rate decrease, people prefer to spend their money rather than saving in the bank. Since the treasury yield decrease, the investors tend to choose other investment product than the treasury bonds. The reason why treasury rate is more significant than federal fund rate is, the SPAC is more about an investment decision. From 2006 to 2008, the 10-year treasury rate and the interest rate also decreased a lot, at that period, the number of SPAC IPO had an increase rate of 32.1% in 2006 and 78.3% in 2007, which means without the impact of COVID, the relationship between these factors is also reasonable.

Although the SPAC market is impacted by many different factors, it is a strong policy-oriented product. In the absence of major changes in other conditions, the policy changes had a drastic impact on SPAC IPO market—a -88.1% decrease from March to April. Oddly, the SPAC market began to grow again just after April, which means the stringent regulations have some potential benefits on SPAC IPO market. Although this policy has largely taken the heat out of the SPAC, it has also helped to screen out unqualified companies. It is bad for the SPAC market in the short term, but it is good in the long term.

The COVID-19 outbreak is a direct factor behind the rise of SPACs, which are simpler than traditional IPO process. First, the life cycle for conventional IPO is much longer than M&A process, the time cost for SPAC is much lower. Second, the outbreak of epidemic is unpredictable, which means the quarantine could take place at anytime and anywhere, and that restrict the roadshow of conventional IPO process. Third, the normalization of COVID also increase the people's confidence on SPAC. The performance of SPAC during epidemic period demonstrates the feasibility and the superiority of the SPAC technic.

The high valuation of the SPAC target company shows the boom of SPAC IPO

market. In this position, the SPAC act as a supply and need to fund a target company to do M&A, and the target company is the demand side. When more and more SPAC finish IPO and start searching for target company, the demand part has the bargain power. However, since more and more SPAC finished IPO and search for target company, the market has already unbalanced, so investors may be looking away from IPOs to search for target company for a while.

This paper mainly focuses on the SPAC IPO market, and it does not as attractive as other SPAC parts, and this paper helps fill this vacancy slightly. Besides, through the case analyses by testing the EV/EBITDA, it provides a general way for investors to get close to the valuation of the target company and could help them make their investment decisions.

## **6 limitations and Futures**

There are three limitations in this paper, especially for the monthly number of SPAC IPOs. From all of the specific SPAC database, including SPAC analytics, SPACinsider, and SPACtrack, they all have the number of yearly SPAC IPO since 2003, and all the data from different sources could match. However, when it comes to the monthly data, most of these data sources do not have this number. The number of monthly SPAC IPO in this paper comes from Bloomberg and the SPACtrack. On Bloomberg, it shows 238 SPAC IPO events in 2020, but the accurate number is 248. And on SPACtrack, it provides 437 SPAC IPO events in 2021, while the true number is 450. Although the errors are limited since the sample is big, the results could be more accurate if the exact number could be used.

Besides, in the first part of this paper, when analyze the impact of the regulation on the SPAC IPO market, the thesis only uses the literature survey method. If some indexes could be developed in this part to measure the regulation could help make the analysis become more reasonable and visual. This part only considers the impact from the SEC regulation but does not contain other policy issues like the quantitative easing. In real world, especially during the epidemic time, the exact performance of the SPAC IPO market could be affected by many other factors.

In the second part of the thesis, the result has a little discrepancy between the official guidance, this paper only tests the EV/EBITDA. And the reason for choosing this valuation method is all based on the theoretical concepts that be provided in the previous literatures. This paper only tests that the EV/EBITDA could be a feasible way for all the investors to evaluate the target company, but some other methods may serve as more accurate way in valuation. For the future research, more new method and model could be created to evaluate the SPAC target company.

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