

Design Report on Investment Strategy of Chemical Industry in China

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Abstract: With the development of science and technology in China, the main economic indicators in the chemical industry have been occupied a pivotal position in industry in the country. 33.2% of the total amount of China's chemical industry of the world the social background. This paper analyses the social background, policy factors and economic conditions of the chemical industry, it also makes a comprehensive analysis of the financial data of the major enterprises in the chemical industry, predicts the development direction of the chemical industry in China in the future, and forecasts the competitiveness of the enterprises in the chemical industry and the development trend of the industry. Finally get the following conclusion in this paper: Through factor analysis of the above data, it is found that Shanghai Petrochemical, Kim Jong Da and Wanhua Chemistry are the three industrial enterprises with the most investment value. Investors can consider and invest at their discretion. The development trend and problems of China's chemical industry were briefly analyzed, and some countermeasures were put forward.

Keywords: Chemical industry; The listed company; Investment value; Factor analysis

1. Introduction

Nowadays, with the rapid changes in the stock market and the sharp fluctuation of prices, investors' various speculative activities are at great risk, which is easy to bring huge losses to themselves. Therefore, the method of value investment analysis is accepted and used by more and more people. Value investment is a series of scientific analysis based on the company's actual operation and financial report data, which can objectively and effectively reduce risks and conform to the hypothesis of "rational economic man". In terms of financial investment, it can give us more reliable information and help us to obtain a higher expected rate of return. This paper chooses chemical industry as an example to illustrate and analyze the value of securities investment of listed companies.

With the continuous progress of science and technology, China's economic development has entered a new normal, industrial structure is more optimized, energy consumption is reduced, resources, high energy consumption, high emission industries are also gradually declining. With the acceleration of industrialization and urbanization, China's chemical industry is facing more and more challenges. With the demand of chemical industry upgrading, many industrial enterprises are facing the problems of technology upgrading and industrial structure optimization. The future development of chemical industry in China has become a topic of concern.

As of the first half of 2018, there are more than 300 listed chemical enterprises in China. Nowadays, more and more

attention has been paid to environmental protection in our country. Today, many of the chemical enterprises that polluted heavily have achieved good results before, and those that polluted heavily suffered a blow. On the contrary, the chemical enterprises that attached importance to industrial upgrading and actively catered to the national policy have developed rapidly. So it is very important that which companies deserve investors' continuous attention and are suitable for investment. Therefore, this paper will not only analyze from the macro perspective, but also from the factor analysis dimension to evaluate the value of the relevant enterprises.

2. Research Meaning

The valuation of listed companies is a problem that every rational investor must face. The valuation of listed companies is convenient for investors to make more accurate judgments and decisions. The analysis of the investment value of China's chemical industry will help us to have a better understanding of the future development direction of China's chemical industry and seize investment opportunities in related fields. At the same time, it promotes the perfection and development of asset appraisal system in related industries, and ensures that the investment mechanism evaluation of chemical industry companies can be accurately and efficiently realized.

From the micro point of view, the analysis of the related value investment of chemical enterprises can help enterprises better understand their own business situation, determine the further development direction, and help

enterprises expand or shrink the scale and merger and reorganization activities.

2.1. Development of chemical industry

Influenced by the domestic and foreign economic environment, the chemical industry is facing many challenges from 2015, such as declining benefits, overcapacity, rising costs, resource and environment constraints and inadequate innovation capacity. In recent years, the chemical industry has maintained pull-in operation as a whole. From the perspective of sub-industries, the strong cycle characteristics of the chemical industry have made the electronic industry constantly changing in recent years. Pre-performance companies are also concentrated in such sub-industries as compound fertilizer, lithium battery industry chain, special chemicals, new materials, polyester and polyester. According to the performance data of the chemical industry in the first three quarters of 2016, the net profit of the industry is 81.3 billion yuan, an increase of 20.64% over the same period of last year, and the profitability of the industry is remarkable. The main reason is that the price of crude oil and other raw materials is at a low level. At the same time, the industry has gone through a round of capacity removal, which has resulted in the gradual improvement of the industrial

concentration and the corresponding optimization of the product structure. The gross and net sales interest rates of the chemical industry were 21.67% and 3.67% respectively, up 10.17% and 28.32% respectively. Since 2016, compared with the improvement of profitability, the improvement of investment completion rate of chemical manufacturing industry is not obvious, which indicates that the future expectations of enterprises in recent years are not optimistic, indicating that capacity will be the main theme of these two years. Therefore, according to the market demand, the foundation of R&D and the principle of breaking through the possibility, the Federation of Petrochemical Industry has determined and initiated the construction of innovative public R&D platforms for five emerging industries: energy and new energy technologies, new chemical materials, fine and chemical products, modern coal chemical industry, energy saving and emission reduction, and actively developed and promoted advanced technologies, which also played an important role in the subsequent industrial development. It plays an important role. The following figure shows the development of China's industrial enterprises in the past two years:

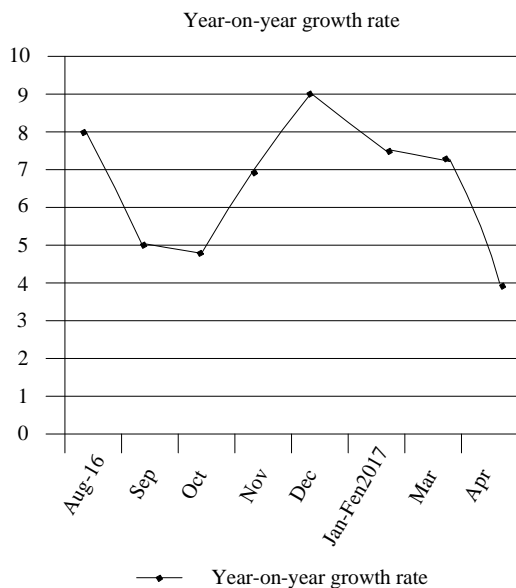


Figure 1. The gross industrial output rate of scale and over

2.1.1. Resource and energy consumption and large emission of "three wastes"

In 2016, China's net crude oil imports amounted to 381 million tons, with an external dependence of 65.4% and

natural gas imports of 75.24 billion cubic meters, with an external dependence of 32.9%. The total energy consumption of the whole industry is about 550 million tons of standard coal, and the discharge of wastewater is close

to 4 billion tons. Chemical oxygen demand, ammonia nitrogen, sulfur dioxide, nitrogen oxides, volatile organic compounds and hazardous wastes are all in the forefront of the industrial industry.

2.1.2. Pollution control is more difficult

Industrial industry includes a wide range of technologies, a variety of raw materials, a long process route, resulting in many kinds of waste, the composition is very complex, it is difficult to deal with. For example, volatile organic compounds, the odor and odor produced by such organic compounds are toxic and harmful, with high pollution load, poor biodegradability of refractory toxic wastewater, difficult to recycle and utilize various hazardous wastes such as waste acid, waste salt, distillation residue and so on, which has become a major problem hindering industry pollution.

2.1.3. Insufficient technical support capacity

The main body of technology research and development in environmental protection industry is still universities and research institutes. Enterprises' ability of environmental protection innovation has always been insufficient, with less original technology and insufficient core technology. Especially in the key areas of energy saving and emission reduction, resource recycling and waste disposal, there is a lack of advanced technology. High salt wastewater and waste salt recycling technology, waste acid energy-saving reuse technology, etc.

2.2. Macro-environment analysis of chemical industry

2.2.1. National capacity to increase environmental protection efforts

On March 5, 2018, Premier Li Keqiang paid great attention to the future development of China's chemical enterprises in his Government Work Report at the first meeting of the 13th National People's Congress. According to the Government Work Report, in 2018, the state will have higher requirements for environmental protection, more enforcement efforts will be made, and the environmental protection work of chemical enterprises will continue to be strengthened. The era of bad money driving out good money has come to an end. Enterprises that really meet the environmental protection standards will face better development opportunities. (Source: China is planning to build a project network). Two issues are particularly mentioned in the "Government Work Report". One is to reduce production capacity. The report mentions that in 2018, China will reduce steel production capacity by another 3 million tons, and withdraw about 150 million tons of coal production capacity. At the same time, it is necessary to eliminate coal-fired power units under 300,000 kilowatts of shutdown and so on. For the coal-fired power units that fail to meet the standard, most

enterprises can make relevant adjustments through the policy buffer period, but it still has a greater impact on the plastic production enterprises within the radiation of some shut-down enterprises, especially the downstream terminal production enterprises. Second, ecological civilization. Huang Runqiu, Vice Minister of Environmental Protection, said that the current situation of air pollution control is still at a more severe stage. It is one of the urgent events to implement the compensation system for ecological environment damage and improve the ecological compensation mechanism so as to protect the ecological environment with a more effective system. From the perspective of "the most severe environmental protection season in history" in 2017, the implementation of domestic environmental protection policies will become more and more stringent and normalized in the future. During this year's two sessions, people paid great attention to the new policy requirements on environmental protection. 2018 will bring new challenges to the whole chemical industry. For the industry standardization and the elimination of enterprises that do not meet the environmental protection standards, the re-shuffling of the industry will be accelerated, and the demand will continue to flow to large-scale production and processing enterprises with high production standardization. It may be more difficult for small and medium-sized enterprises, individual business households and so on to survive, but the overall impact on the demand of the chemical industry is relatively limited.

2.3. Economic environment analysis

2.3.1. Overburdened tax revenue

At present, the tax burden of petroleum and chemical industry is very heavy, and the proportion of tax revenue to income and profit is obviously higher than the national average level of industry. The main reason is that the tax share of oil and gas exploitation industry and refining industry exceeds the industry average level and the national industry average level by a large margin. Refining industry's contribution income accounts for about 20% of the main business income. Tax revenue exceeds profits by nearly ten times. Oil and gas exploitation industry's contribution income accounts for more than 10% of the main business income. Profit is now a serious net loss.

2.3.2. Labor costs are rising too fast

In recent years, the labor cost of the industry has been growing rapidly, the wages of employees have been rising constantly, and the proportion of labor cost in sales income has been increasing. The "five insurance and one fund" as a whole has accounted for about 40% of the total wages of employees.

2.3.3. High cost of electricity use

At present, the high cost of electricity consumption in domestic enterprises has seriously affected the competitiveness of enterprises in the market and aggravated the production cost. In recent years, the electricity cost of chemical fertilizer, methanol and chlor-alkali industries accounts for a large proportion. Although the price of coal has dropped obviously in recent years, the price of electricity has increased substantially in general. The proportion of energy cost, mainly electricity, in the total cost of enterprises has also increased, and the cost pressure has increased significantly. There are chlor-alkali enterprises, the company's monthly electricity bills accounted for as much as 60% of revenue.

2.4. Company value

The company value was first put forward by William Peddy in the theory of labor value. Influenced by Karl Heinrich Marx, it is pointed out in *Das Kapital* that the company value is a value determined by the social necessary labor time condensed in the company. In the 1970s, Jevins pointed out in his *Political Economy Theory* that company value is the value of explaining value and its formation process by means of the ability of goods to satisfy people's desires or subjective psychological evaluation of goods'utility. In the 1990s, based on the theory of production cost in classical economics, Marshall put forward in the *Principles of Economics* that the value of a company is the value under the combined action of the law of demand and the law of supply. In *Dividend Policy, Growth and Stock Valuation*, Morton Miller and Modig-

lani in the 1950s believed that company value was positively correlated with the company's future cash flow. The value of a company is the present value of its expected free cash flow discounted at the discount rate based on its weighted average capital cost. It is closely related to the financial decision-making of the enterprise and reflects the time value, risk and sustainable development ability of the enterprise's capital.

2.5. Factor analysis of investment value of listed companies in chemical industry

Due to the large number of listed chemical enterprises, this paper selected the top 14 companies to carry out value evaluation: Sinopec 600028, Shanghai 600688, Rongsheng 002493, Hengyi 000703, Sinochem 600500, Huahua 60030.9 million, Hengli 600346, Huayi 600623, Sino-Thai 002092, Yuntianhua 600096, Donghua 002221, Huajin 000059. Shares, 601233 Tongkun Shares, 002470 Jin Zhengda.

Index selection

Through the research, this paper selected the following six indicators to represent the profitability, operating ability and debt paying ability of the enterprise, reflecting the investment value of the enterprise more comprehensively. Among them, profitability is embodied by total assets return rate and net profit rate; solvency is embodied by assets-liabilities ratio and liquidity ratio; and operating ability is embodied by fixed assets turnover rate and inventory turnover rate. The collected data are shown in Table 1 below.

Table 1. Major financial indicators of the top 14 listed companies in chemical industry

Corporate name	Return on total assets (%)	Net profit margin (%)	Inventory turnover	Fixed assets turnover rate	Liquidity ratio (multiple)	Asset-liability ratio (%)
SINOPEC	1.19	3.02	2.65	0.97	0.98	44.21
Shanghai petrochemical	4.33	6.88	3.06	2.03	1.93	28.16
Rongsheng petrochemical	0.95	3.60	3.46	0.86	0.62	59.93
Heng Yi petrochemical	1.98	4.46	5.94	1.97	0.64	55.98
Sinochem International	0.56	2.26	1.76	2.15	1.44	62.70
Wanhua chemical	5.36	26.07	1.04	0.49	0.89	53.66
Hengli stock	1.58	9.53	1.61	0.48	0.60	72.43
Huayi Group	1.16	4.24	2.41	0.92	1.12	49.64
Chemistry of China and Thailand	0.74	4.13	2.9	0.39	0.77	66.94
Yun Tian Hua	0.08	0.51	0.96	0.45	0.65	92.2
Donghua energy	1.47	3.75	5.07	1.1	1.39	67.11
Huajin shares	1.01	3.82	1.56	0.59	0.78	57.84
Tong Kun shares	1.82	6.4	2.16	0.74	0.63	50.94
Kim Jong Da	2.6	7.71	1.84	1.49	2.01	39.92

Table 2. Correlation matrix

		Return on total assets	Net profit margin	Inventory turnover	Fixed assets turnover rate	Liquidity ratio (multiple)	Asset-liability ratio
Relevant	Return on total assets	1.000	0.833	-0.047	0.181	0.371	-0.594
	Net profit margin	0.833	1.000	-0.299	-0.219	0.008	-0.227
	Inventory turnover	-0.047	-0.299	1.000	0.437	0.018	-0.149

	Fixed assets turnover rate	0.181	-0.219	0.437	1.000	0.629	-0.493
	Liquidity ratio (multiple)	0.371	0.008	0.018	0.629	1.000	-0.591
	Asset-liability ratio	-0.594	-0.227	-0.149	-0.493	-0.591	1.000
Sig. (unilateral)	Return on total assets		0.000	0.437	0.268	0.096	0.012
	Net profit margin	0.000		0.150	0.226	0.489	0.217
	Inventory turnover	0.437	0.150		0.059	0.475	0.305
	Fixed assets turnover rate	0.268	0.226	0.059		0.008	0.036
	Liquidity ratio (multiple)	0.096	0.489	0.475	0.008		0.013
	Asset-liability ratio	0.012	0.217	0.305	0.036	0.013	

Source: Operated by SPSS application.
 Data Source: The annual report of Dongfang Fortune Online Listing Company
 Empirical Study on Stock Value Investment with Outstanding Performance of Listed Companies in Chemical Industry Based on Factor Analysis Model
 principal component analysis
 As shown in the figure below, the corresponding names are represented by index codes: X1 represents the total

asset return rate, X2 represents the net profit, X3 represents the fixed asset turnover rate, X4 represents the current ratio, and X5 represents the asset-liability ratio. From the above matrix, it can be seen that there is information overlap among the six original variables, which requires dimensionality reduction of the original data for subsequent analysis.

Table 3. Test of KMO and bartlett

Kaiser-Meyer-Olkin Measure of Sampling Sufficiency		0.525
Bartlett's sphericity test	Approximate chi square	40.755
	Df	15
	Sig	0.000

Source: Operated by SPSS application.
 Bartlett spherical test and KMO test were used to determine the correlation among the six variables. KMO statistics and Bartlett test are mainly used to test the applicability of factor analysis. KMO statistics are used to test whether the correlation between variables is too small, and Bartlett tests whether the correlation matrix is a unit matrix. According to the analysis results of the correlation coefficient matrix of the original variables above, most of the variables passed the t-test which assumed that the correlation coefficient between the corresponding variables was 0. KMO mainly tests the partial correlation between variables, which is between 0 and 1. In principle, the closer the partial correlation is, the stronger the partial correlation is. Factor analysis has the best effect when the statistic is greater than 0.7. It is not applicable when the statistic is less than 0.5. It is necessary to consider adjusting variable mechanism or changing other analysis me-

thods. From 3, the Bartlett test corresponds to 0.000 significance, and the assumption of independence among variables is not valid, that is, there is a strong correlation among variables. Therefore, the applicability of Bartlett test in factor analysis passes, KMO statistic is 0.525, less than 0.7, indicating that there is a certain degree of information overlap among variables. Although factor analysis may be imperfect, it can be tried.

Factor analysis results

From Table 5-4, we can see that only λ_1, λ_2 are larger than 1. The first two common factors are extracted automatically by SPSS software. The first common factor accounted for 43.121% of the total variance, and the second common factor accounted for 31.611%. The sum of the two factors reached 80% of the total variance. Therefore, the first two factors are selected to describe the overall level of the stock investment value of chemical enterprises.

Table 4. Total variance of interpretation

Ingredients	Initial eigenvalue			Extract Square Sum Loading			Rotating Square Sum Loading		
	Total	Variance %	accumulate %	Total	Variance %	accumulate %	Total	Variance %	accumulate %
1	2.587	43.121	43.121	2.587	43.121	43.121	2.417	40.289	40.289
2	1.897	31.611	74.732	1.897	31.611	74.732	2.067	34.443	74.732
3	0.857	14.276	89.008						
4	0.376	6.265	95.273						
5	0.235	3.913	99.186						
6	0.049	0.814	100.000						

Extraction Method: Principal Component Analysis

Source: Operated by SPSS application.

As shown in Fig.1, after extracting two common factors, the concrete data obtained by calculating the commonality of each variable are shown in Table 5-5 below. Variable commonality is mainly used to illustrate the degree of similarity expressed by the common factors extracted

from the original information contained in each variable. From 5, we can see that the commonality of other variables is more than 70% except the common degree of inventory turnover rate is 44.3% and the common degree of liquidity ratio is 66.4%. Therefore, the explanatory ability of these two common factors is strong.

Table 5. Common degree of variables

	Initial	Extract
Return on total assets	1.000	0.917
Net profit margin	1.000	0.897
Inventory turnover	1.000	0.433
Fixed assets turnover rate	1.000	0.827
Liquidity ratio (multiple)	1.000	0.664
Asset-liability ratio	1.000	0.745

Method of extraction: Principal component analysis. Source: Operated by SPSS application.

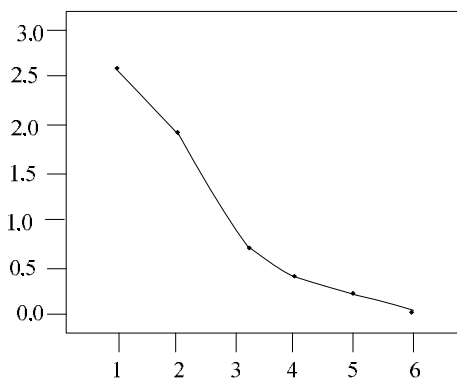


Figure 2. Scree plot

Source: Operated by SPSS application.

Scree Plot (Scree Plot) is mainly used to indicate the importance of each factor. Its horizontal axis is the factor serial number, and its vertical axis is the characteristic root size. The gravel maps rank the factors according to the size of the characteristic roots, and show which are the main factors as clearly as the total variance according to the steepness of each segment. The larger the slope, the larger the characteristic root, the more obvious the effect. The smaller the slope, the smaller the characteristic root and the weaker the influence.

From Fig. 2, we can see that the first two factors have a larger slope, while the last four factors have a smaller slope, and the eigenvalues of $\lambda_3, \lambda_4, \lambda_5$ and λ_6 are all smaller than 1. It also shows that only two common factors are common factors and only consider them.

Table 6 shows that the factor load matrix can be interpreted as the principal component coefficients, i.e. the magnitude of the influence of each factor on each variable according to the direction of each column. In this

paper, the following six algebraic formulas are used to fit six variables with two common factors.

$$\begin{aligned} ZX1 &= -0.861F1 + \epsilon_1 \\ ZX2 &= 0.793F1 + \epsilon_2 \\ ZX3 &= 0.768F1 + \epsilon_3 \\ ZX4 &= 0.650F1 + 0.636F2 + \epsilon_4 \\ ZX5 &= -0.848F2 + \epsilon_5 \\ ZX6 &= 0.637F2 + \epsilon_6 \end{aligned}$$

Variables in the above algebraic formulas are standardized variables, and squid 1-squid 6 represents a special factor. It contains a set of all factors affecting the variable except the two common factors above. The degree of influence on the variable is equal to 1-variable commonality. (Since the absolute value of factor analysis is set to 0.6 in the option column for more accurate real data, some of the component coefficients obtained in Table 6 below are only one.) This paper chooses six factors to reflect the investment value of chemical industry stock. After factor analysis, only two factors can reflect the investment value of chemical industry stock.

Table 6. Factorial load matrix

	component	
	1	2

Asset-liability ratio	-0.861	
Return on total assets	0.793	
Liquidity ratio (multiple)	0.768	
Fixed assets turnover rate	0.650	0.636
Net profit margin		-0.848
Inventory turnover		0.637

Method of extraction: principal component.

A. Two components have been extracted.

Source: Operated by SPSS application.

Because we hope that the limit of load can approach zero or 1, in order to show the actual meaning of each factor more clearly, we adopt the method of maximum variance orthogonal rotation, and simplify the structure of the common factor load obtained by rotating the original coordinate axis so as to summarize its actual meaning. At the same time, the information expressed by each factor is more comprehensive.

From Table7, it can be seen that after rotation, the load coefficients reflected by each common factor approach 0 and 1 respectively. The first common factor has a large load on variables X1 and X2, which can represent the situation of business capability. The greater the first common factor 1, the stronger its solvency. The second common factor has a larger numerical load on X4 and X5, which indicates the profitability, so the bigger the second common factor, the stronger the profitability of the enterprise.

Table 7. Factorial load matrix after rotationa

	Component	
	1	2
Asset-liability ratio	0.880	
Return on total assets	0.802	
Liquidity ratio (multiple)	-0.780	
Fixed assets turnover rate		
Net profit margin		-0.946
Inventory turnover		0.860

Method of extraction: principal component.

Rotation method: Orthogonal rotation method with Kaiser standardization.

A. The rotation converges after three iterations.

Source: Operated by SPSS application.

Empirical Analysis of Stock Investment Value of Listed Companies in Chemical Industry

The three common factor scores of SPSS automatic output, as shown in Fig. 2, show the stock investment value of the 14 major industrial enterprises listed in China from different aspects. In order to avoid the error caused by

using one common factor alone, we use the variance contribution rate corresponding to each common factor as the weight, and get the comprehensive score F by calculating as follows:

$$F = (\lambda_1/\lambda_1+\lambda_2) F_1 + (\lambda_2/\lambda_1+\lambda_2) F_2 = (2.587/4.484) * F_1 + (1.897/4.484) * F_2$$

The eigenvalues are obtained from Table 4., among, $\lambda_1=2.587$, $\lambda_2=1.897$

Operating in SPSS gives you the following comprehensive score:

Table8. Score table for each factor

Corporate name	FAC-1	FAC-2	Composite score	Ranking
SINOPEC	0.17428	-0.27524	-0.02	6
Shanghai petrochemical	2.07806	0.70082	1.5	1
Rongsheng petrochemical	-0.35294	-0.56765	-0.44	11
Heng Yi petrochemical	0.8861	-0.93122	0.12	4
Sinochem International	0.67027	-0.8015	0.05	5
Wanhua chemical	-0.55859	2.94516	0.92	3
Hengli stock	-1.15693	0.37992	-0.51	12
Huayi Group	0.07575	-0.17505	-0.03	7
Chemistry of China and Thailand	-0.79187	-0.41182	-0.63	13
Yun Tian Hua	-1.64527	-0.75967	-1.27	14
Donghua energy	0.46861	-0.79607	-0.07	8
Huajin shares	-0.66064	-0.0936	-0.42	10
Tong Kun shares	-0.40441	0.22818	-0.14	9
Kim Jong Da	1.21758	0.55775	0.94	2

Source: Operated by SPSS application.

2.6. Research conclusions and investment proposals

2.6.1. Research conclusion

Through factor analysis of the above data, it is found that Shanghai Petrochemical, Kim Jong Da and Wanhua Chemicals are the three industrial enterprises with the most investment value. Investors can consider and invest at their discretion.

2.6.2. Investment suggestions for investors

Rational Allocation of Investment Funds

Reasonable allocation of investment funds is one of the most important things in stock investment. In investing, investors should pay attention not to put eggs in a basket, but to know how to spread risks. Although this paper analyses the value investment of chemical industry, we do not advocate putting all the funds in the same industry's stocks or other investment instruments, which cannot disperse the risk. When the market is depressed, all stocks in the same industry will be affected. On the contrary, it increases the investment risk. It is suggested that the value analysis of enterprises in different industries and the investment of leading enterprises should be carried out. To a certain extent, leading enterprises have strong strength and strong anti-risk ability, which can better cope with the fluctuation of national policies or economy.

Improving Professional Quality in Investment

Before entering the stock market, investors need to possess certain professional qualities and have a certain understanding of the basic tools of the stock market and the macroeconomic situation. Fundamental analysis and technical analysis can be used to invest to a certain extent. More importantly, it is important to master the basic methods of financial analysis so as to have a clearer judgment on the business situation, growth and investment value of enterprises, and to select the listed companies with strong development potential. Only in this way can we better carry out the voting transactions.

Strengthening Psychological Bearing Capacity

Stock investment is a high-risk investment project, which requires a certain degree of psychological endur-

ance of investors. First of all, investors should have a reasonable assessment of their risk tolerance, accurately determine whether they are risk preference, risk neutral or risk aversion type, and judge whether they are suitable for this high-risk, high-yield investment activities, and be able to have independent risk investment awareness, not easily disturbed by noise in the market.

2.6.3. Revelation

In this paper, factor analysis of chemical enterprises in China using SPSS software is carried out, and the conclusions are limited to a certain extent by the company's financial indicators data research conclusions, for the current market conditions, relevant industrial policies and other information analysis is not perfect. In order to make the statistical conclusions more practical, it is suggested to investigate the relevant industries in depth and keep pace with the times so as to be more realistic in approaching the internal situation of the industry. As a researcher, this is what we should pay attention to.

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