

# *The Application of Profit Media and Market Cognition in Asset Structure*

Baifang Liu\*, Yajing Ji, Chenxi Zhou

*School of Business, Beijing Language and Culture University, Beijing, 100083, China*

*\*Corresponding author*

**Keywords:** Profitable media, asset structure optimization, value signal, market perception

**Abstract:** China proposes to build a new development pattern with the domestic big cycle as the main body and the domestic and international double cycles promoting each other. In this context, domestic enterprises inevitably need operational transformation, especially the optimization and adjustment of their asset structure. Therefore, it requires domestic enterprise decision-makers to ponder how to optimize the asset structure in order to win in excess competition under the conditions of excess market. This issue constitutes the key to the implementation of the "dual cycle" new development pattern for enterprises. In this article, the market epistemic difference between asset reorganization and production structure optimization, and how the profit media parameters affect the market's consciousness of asset structure optimization. The summaries forecast that the exchanges identify the differences of asset structure between triumphant and unsuccessful companies, but without confirming them as valid value signals, nor can it distinguish whether the adjustment measures of asset structure targeted towards production optimization or value of profit, by studying the asset structure of enterprises is also of practical significance for improving the production and operation efficiency of enterprises.

## **1. Introduction**

Transaction costs create potency limitations between corporations and markets. With the rapid development of information technology, this boundary of cost-centered efficiency is becoming more and more ambiguous[1].The production, ownership, propaganda and cognition of information have become a new boundary between organizations and markets. Every step of information exchange may make the tissular boundary, leading to its convergent-divergent[2]. From the angle of information, tissular boundaries are characterized by dynamic changes at all times.

Relevant information on the optimization and restructuring of business asset structure continues to be generated and spread[3]. Whether the market can identify these feedback directly or through mass media variables is the main issue in the value analysis of company asset optimization strategy. In order to solve this problem, this paper makes the following arrangements: First, the value transfer and non-value transfer mechanism of structural optimization are analyzed; Secondly, the difference of market recognition between capital reorganization and pattern of production optimization is studied; Thirdly, it must pay close attention to the influence of profit media variables on the

market's perception of asset structure optimization; Finally, the investigated conclusion is summarized. The achievement of this paper lies in two points. The first is to put forward and test a new point: the market can differentiate the asset structure diversities between successful and failed companies in asset restructuring, but it cannot be confirmed in the form of value signals. The second is that the market cannot distinguish between the direction of production optimization or the direction of profit value in the asset structure adjustment strategy.

## **2. Information Value Transmission of Structural Optimization**

### **2.1. Category of Value Transmission Mechanism**

The value transmission machinery of asset structure optimization of nationalized enterprises can be divided into two categories: The first is the for-profit transmission mechanism, and the other is the non-for-profit transmission mechanism. The for-profit transmission mechanism is the main value transmission mechanism, and the non-for-profit transmission mechanism is an immediate mechanism, which realizes the transmission of enterprise value by rapidly affecting the market expectations. Many studies have shown that the non-profit transmission mechanism can ultimately be attributed to the profit channel, which can cause fluctuations in the future profitability. If the structural adjustment of non-profit assets cannot be attributed to the profit channel, the value carried by its transmission signal is difficult to endure, which is essentially price noise.

The two value transmission mechanisms determine that the market or investors' interpretation of the asset structure adjustment of nationally enterprises is grouped into two levels: micro-enterprises and macro-policies[4]. In terms of micro-enterprises, the pursuit of state-owned capital profit is the main goal of enterprise operation. The adjustment of enterprise asset structure affects the profitability of enterprises, and the fluctuation of profitability will lead to the fluctuation of enterprise market value. In terms of macro policy: state-owned enterprises are one of the main players in the market, and building them as the main force of the market economy is also the focus of the government's economic policy. State-owned enterprises are not only the experimental fields of national macro policies, but also the executors. The usefulness of Macro-Economy Policy is embodied in such indicators as enterprise asset scale, production efficiency and feasibility[5]. In the final analysis, the profitability of the enterprises is the basic assurance to give full play to the implementation of macroeconomic policies of the state-owned economy.

### **2.2. Profit Transmission Mechanism**

According to the direction of profit distribution, there are three main profit transmission mechanisms for optimizing the asset structure of state-owned enterprises: market mechanism (equity and creditor's rights), tax mechanism and compensation mechanism[6]. Investors or creditors, represented by state-owned shares, obtain dividends, capital appreciation, gains or creditor's rights gains from listed state-owned companies held or lent in the capital market, which is a market mechanism; In addition to reporting to government investors in the form of dividends, state-owned enterprises also submit to the national tax authorities in the form of income tax, value-added tax and other taxes, which is the tax mechanism; State-owned enterprises pay their employees in the form of salary, which is the salary mechanism of state-owned enterprises' profit transmission[7]. Market mechanism and tax mechanism are the main mechanisms of profit transmission. Compared with the former two mechanisms, the compensation mechanism is in a subordinate position, but it has an important impact on the profit transmission mechanism of state-owned listed companies[8]. Some researchers study the operating efficiency of state-owned enterprises from the perspective of salary incentives and principal-agent costs[9].

The production and operating activities and performance of quoted companies under the area within jurisdiction of state-owned business are always involve other subjects of the capital market, and also affect the whole capital market. In the first place, state-owned listed business have an enormous volume and are the backbone of the capital market. The huge volume and crucial market standing earn the profit and deficit changes of state-owned listed business a kind of market turbulence[10]. In the next place, state-owned listed business commitment many "political" assignments of government's economic policies or control measures, and are the media and instruments for the government to supervise the market and remedy market shortcoming. Therefore, the main task of this part is to study the profit transmission market mechanism of asset structure optimization. As control factors, tax mechanism and compensation mechanism are included in the model construction of market mechanism[11]. The asset composition optimization of state-owned companies can be divided into two categories: operations improvement and strategic optimization. Since the capital market is faulty in messages, in order to alleviate the situation of information asymmetry, the capital market has constituted a major incident reporting system. In this state of market, investors can only watch the main tactical asset allocation, improving structure and other messages through the lay bare of system allocation. The production and operation activities of firms is a "black box" for the market. It is difficult for investors to straightway look into the act of production of firms. Hence, whether there is the connection between the structural optimization of productive assets and the market cap of companies cannot be rapidly resolute, and the research can only be carried out by taking profit and other factors as intermediate variables.

### **2.3. Non-profit Transmission Mechanism**

The not-for-profit conduction mechanism basically refers to the undulation of the market's expectation of future corporation value invited by the structural adjustment of unproductive assets. China's securities law provides for 21 major disclosures, many of which are related to the optimization of asset structure. For instance, major changes in the company's business policy or business scope, major investment behavior and major asset purchase decisions, important contracts that affect assets and other factors, major assets being sealed up or frozen, and obtaining large amounts of subsidies or additional benefits, etc., may lead to changes in the asset structure and ultimately affect the profitability of the enterprise. That is to say, the not-for-profit transmission mechanism and the profit passing mechanism have a same goal in value dissemination.

The disclosure of material events may lead to fluctuations in the marketing value of enterprises. Nonetheless, whether the fluctuation of market value can put down to the major asset adjustments disclosed by corporation requires competent corroborate. Because there is no causality in either events in time series. The not-for-profit communication mechanism studies the time series pertinence and causation of matters: asset composition adjustment and enterprise market value time series correlation, and there is causation.

### **3. Research Design and Empirical Analysis**

According to the theory of information economics, major asset adjustments of listed companies may cause fluctuations in their market value. Therefore, this part first analyzes whether the market can effectively distinguish the impact of the successful reorganization and the failure of reorganization on the asset structure, and whether these impacts can be reflected in the abnormal fluctuations of the market value of listed companies when the state-owned listed companies undergo major asset restructuring. If, in the short term, the difference between the success and failure of asset restructuring can be reflected by the market value, while in the long term, the difference cannot be reflected by the market value, it indicates that the non-profit transmission

mechanism of enterprises can play a role. If, in the short and long term, the difference between the success and failure of asset restructuring cannot be reflected by the market value, it means that in the current Chinese capital market, the market value of listed companies still needs to be mainly supported by profits rather than divorced from the market expectations of profits.

### 3.1. Asset Restructuring and Market Volatility

This paper takes the asset restructuring data of quoted companies under the jurisdiction of central enterprises in 2016-2022 as a sample to study whether the company has obtained excess earnings after announcing asset restructuring. The success of asset restructuring of quoted companies will be along with significant adjustment of asset structure, while failure will not lead to significant adjustment of asset structure. Firstly, we will review whether there are diversities in the asset structure between the successful and unsuccessful public companies during the sample period. If there is no striking difference in the asset structure fall in between, this shows two points: first, the enterprise asset restructuring does not necessarily lead to changes in the asset structure. After the completion of the enterprise restructuring, it still follows the productive asset adjustment path. It is difficult for the market to make a reasonable reflection of this asset adjustment path, or it is difficult to observe whether the market has made a response; the second is that the asset restructuring strategy may transmit value information to the market along the non-profit channels. The relationship between the non-profit channels and the structural adjustment of productive assets is weak. For example, the asset restructuring pursuing the tax strategy belongs to the non-profit channel adjustment, belongs to the abnormal business, and has nothing to do with the adjustment of productive assets.

If there is no striking difference in the asset structure fall in between, it shows that the asset restructuring has led to a major adjustment of the enterprise's asset structure, which may influence the enterprise's accomplishment and market value. As a result, first of all, it is inevitable to ensure whether there is any difference in asset structure between the two sets of success and unsuccessful samples. If the difference is significant, the second step is to study whether the difference in asset structure results in the difference in market value. If there is no difference or the difference is not significant, the pertinence between asset structure and market value may not require further research.

On account of the above-mentioned analysis, the follow-up research assumptions are created.

Assumption 1: There are differences in the asset structure optimization strategies between the successful companies and the unsuccessful sample firms.

Assumption 2: The capital market can validly identify the strategical differences in asset structure optimization.

#### 3.1.1. Analysis of Differences in Asset Structure

Table 1: Descriptive statistic analysis of asset structure optimization.

<b>Classify</b>	<b>Number of companies</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev.</b>	<b>SumSq. dev.</b>	<b>Observations</b>
<b>Current ratio</b>						
<b>Success sample</b>	185	0.476145	0.490782	0.254780	768.0480	11833
<b>Failure sample</b>	43	0.494571	0.509395	0.219079	133.0444	2773
<b>Current/non-current assets</b>						
<b>Success sample</b>	186	1.808829	0.963795	2.816291	93845.42	11833
<b>Failure sample</b>	43	1.943841	1.038298	3.774002	39481.84	2773

From 2016 to 2022, there were 228 public companies under the jurisdiction of central enterprises. In the time of the sample period, 43 listed companies failed in asset reorganization, and 185 succeeded in asset restructuring. The asset structure adjustment is described by liquidity ratio (liquid assets/total assets) and liquid/non-liquid assets. The data is selected from Guotai An database and Eviews10 is used for statistic analysis. The analysis consequences are shown in Table 1.

As shown in Table 1, both the liquidity ratio and the liquid/non-liquid assets have similar statistical characteristics: in the liquidity ratio, the average of the both groups of samples are under the median; In liquid/non-liquid assets, the average of the both groups of samples is greater than the median. The sample of award-winning asset restructuring and the sample of losing asset restructuring have inverse statistic characteristics in the alternative variables of the twin asset structures, manifesting that the prosperity of asset restructuring may have different effects on the sample. The following T-test is used to check whether the difference between the both groups is prominent. The analysis results are shown in Table 2.

Table 2: Test analysis of asset structure adjustment.

Variable classification	Mean	Median	Variance
Current ratio	-3.515917 (0.0004)	2.374522 (0.0176)	1.352468 (0.0000)
Current/non-current	-2.117901 (0.0342)	2.374527 (0.0176)	1.795764 (0.0000)

In the preceding table, the values in parentheses are p values, and the rest are value values. Average reports T-test results, Median reports Wilcoxon/Mann-Whitney test results, and Variance reports F-test results. The results of the tests are obviously different: no matter the tests of Mean, Median or Variance, there are obvious differences between the both groups of data. The important group difference can indicate the significant difference between the companies with successful asset restructuring and the companies with failed asset restructuring, whether it is the liquid ratio or the asset structure adjustment action portrayed by liquid/non-liquid assets.

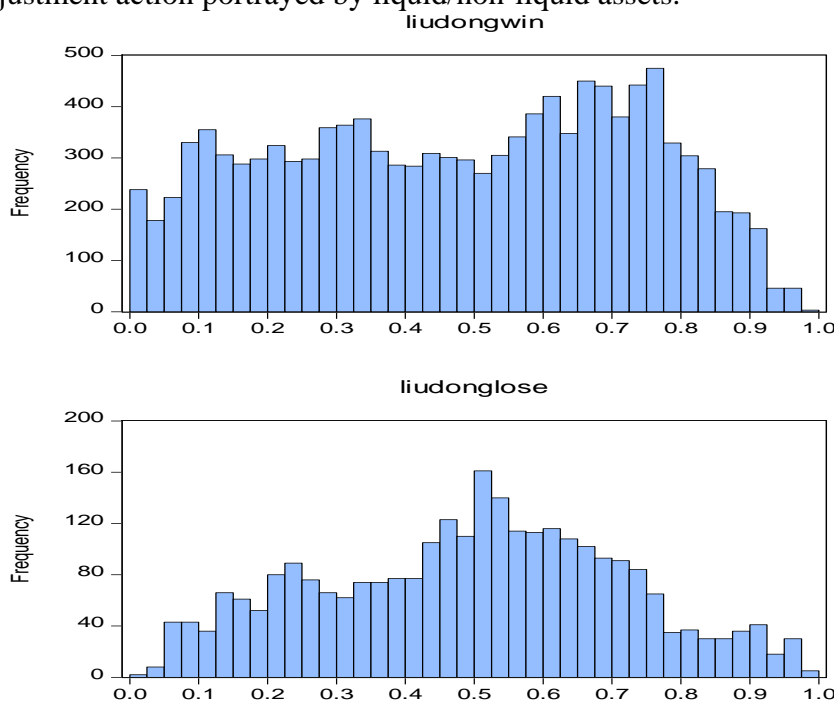


Figure 1: Distribution of asset structure.

In addition to the T-test analysis of the two groups of samples of success and failure, the significant differences in the asset structure of the two groups are confirmed by analyzing their respective distribution maps. As shown in Figure 1, the asset structure of the successful sample is relatively scattered, while the asset structure of the failed sample is relatively concentrated, which is closer to the normal distribution. On account of the above analysis, within the sample cycle, assumption 1 is approved.

### 3.1.2. Signal Difference and Market Cognition

There are differences between the asset structure of the successful and unsuccessful restructuring samples. Whether this discrepancy can be mirrored in the market capitalization of quoted companies depends on three critical points of message passing: the proclamation of asset restructuring information, the success of asset restructuring and the practical adjustment of asset structure. Many studies have shown that on the date of announcement of assets reorganization information, the market will make expected judgments on the reorganization information; when the asset restructuring is successful, the previous market expectations will be supported or disproved, and both periods of time will produce value fluctuations. However, this fluctuation of market value is only based on expectations and has no real profit support. The market value supported by real profits belongs to the third stage, That is, after the asset restructuring is successful, it will enter the actual adjustment stage of the asset structure [Here is a potential assumption that after the reorganization is successful, the enterprise will adjust its asset structure. At present, the asset restructuring of listed companies includes acquisition and merger, equity transfer or sale, asset divestiture, asset replacement and other categories. The operation strategy or method of assets after asset divestiture and replacement will change, resulting in the adjustment and change of the enterprise's asset structure. Equity transfer or sale, acquisition and merger, etc. involve the ownership of assets Changes in rights. When the ownership of the assets changes, the ownership of the company and the management right of the company will play again, and the management right or operation mode of the enterprise or assets will also change accordingly. Therefore, it is assumed that the asset structure of the enterprise will change after the asset restructuring, which is reasonable within the selected sample period.

Since the asset structure has not been substantially adjusted and optimized in the first two stages, no special attention is needed. This chapter centers on the relationship between the market value of the successful asset restructuring samples at the substantial adjustment stage and the asset structure adjustment strategy. Because the research is about the market value at the stage of substantial adjustment of the asset structure, the market value of the company needs to be replaced by the rate of return of a longer window.

Table 3: Descriptive statistic analysis of growth rate.

<b>Classify</b>	<b>Number of samples</b>	<b>Mean</b>	<b>Median</b>	<b>Std. Dev.</b>	<b>SumSq. dev.</b>
<b>Success sample</b>					
<b>Return rate (including dividend reinvestment)</b>	1124	0.119107	-0.009528	0.543126	331.2687
<b>Rate of return</b>	1124	0.118158	-0.008751	0.540539	328.1213
<b>Failure sample</b>					
<b>Return rate (including dividend reinvestment)</b>	299	0.117494	-0.040057	0.518268	80.04334
<b>Rate of return</b>	300	0.119260	-0.022834	0.508264	77.24121

This paper selects the annual individual share reporting rates of successful and failed asset restructuring from 2016 to 2022 to describe the marketing value of public companies. Among the



rest, there are 1266 successful specimens and 301 losing specimens. After removing noneffective data, the residual successful samples are 1124 and 300 failed samples. The data is selected from Guotai'an database. The descriptive statistic analysis is shown in Table 3.

As shown in Table 3 above, the average rate of return of successful and failed asset restructuring samples is relatively close, respectively (0.119107, 0.117494), (0.118158, 0.119260), and the median rate of return is also relatively close, respectively (-0.009528, -0.040057), (-0.008751, -0.022834). The average difference between the two sets is less than 2 %, and the median difference between the two sets is high to 3%. Thus it can be seen that there is no obvious difference between the annual individual stock yield of the successful and unsuccessful asset restructuring samples.

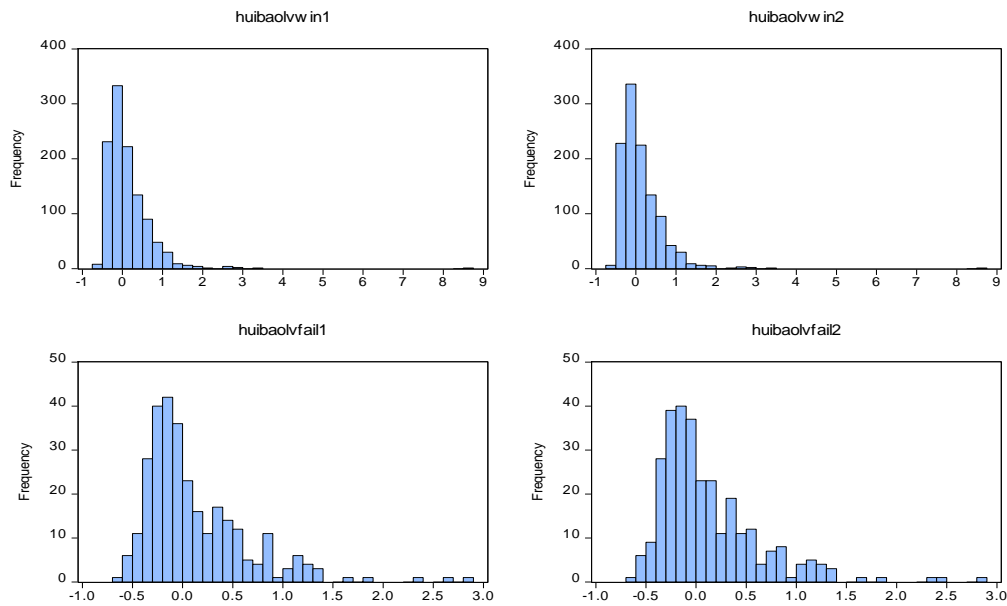


Figure 2: Distribution of individual stock returns.

By comparing and analyzing the distribution Figure 2 of successful and failed asset restructuring samples, it is found that the distribution of huibao lvwin 1 and huibao lvfail 1 is similar, and the distribution of huibao lvwin 2 and huibao lvfail 2 is also similar. Under the circumstances, it can also be reasonably determined that there is in-apparent difference in the return rate between the two groups of samples.

In order to further confirm whether there is an obvious difference between the yield rates of the two sets of samples, T-test is accepted to analyze the yield rates of the two sets of samples. Using Eviews10 as the inspection instrument, the results are shown in Table 4.

Table 4: T test of annual yield rate of individual stocks.

Variable classification	Mean	Median	Variance
Yield rate (dividend reinvestment)	0.046052 (0.9633)	0.418201 (0.6758)	1.098226 (0.3226)
Rate of return	-0.031747 (0.9747)	0.129980 (0.8966)	1.131037 (0.1924)

In Table 4 above, the values in brackets are p values, and the rest are value values. From the test outcomes, there is no obvious difference between the two sets of sample mean values of the annual return rate of individual stocks including dividends and reinvestment income, with a probability of 0.9633; The average difference between the two groups of sample annual returns of individual stocks excluding dividends and reinvestment income is also not significant, with a probability of

0.9747. The rest of the media and variance tests are not significant.

According to the results of descriptive statistic analysis, distribution map and T-test, it can be made sure that the success of asset restructuring has non-significant influence on the return of personal stocks, and the market value has no significant fluctuations due to the success of enterprise asset restructuring. In order to enhance the robustness of the conclusion, this paper selects quarterly and monthly data of individual stock returns for statistical analysis and T-test. The experimental results still manifest that there is non-significant difference between the two sets of sample returns. It can be seen that in a relatively short term of time, the success of asset restructuring has non-significant market value. Hence in the of choice sample term, rejection hypothesis 2 holds. It must be emphasized that monthly data is not a strict short-term period for studying the volatility of the market price of listed companies. However, the financial statements of enterprises are provided monthly as the shortest time period. In addition, major asset restructuring takes a long time and can be completed within 30 working days is rare. Therefore, The monthly data has been the shortest period of time [For some particularly important asset restructuring matters, especially those represented by equity restructuring, the companies involved in the restructuring need to be suspended in order to adapt to the restructuring work that takes longer. These restructuring cases also provide a reference for how to judge the shortest matter.

### **3.1.3. Conclusion**

Through the above research, we can find that the success of asset restructuring of public companies has an obvious influence on the setup of enterprise asset structure. There are obvious differences in the asset structure between the sample companies with successful asset restructuring and the sample companies with unsuccessful asset restructuring. Nevertheless, in a long term of time, this differential signal of asset structure adjustment has non-significant influence on the market value of quoted companies. These cases indicate that the difference in asset structure between the successful and unsuccessful sample companies has not been confirmed by the market in the form of virtual value signals; The market value of public companies adjusted by the structure of non-profit assets is short of a long-range stable foundation; Asset restructuring cannot cause significant changes in market value [This paper does not study in depth whether different asset restructuring methods have different economic consequences. For example, after equity restructuring, enterprises may have major strategic changes, while the possibility of major strategic changes in asset stripping or replacement is relatively small. Therefore, the two may have different economic consequences.

## **3.2. Production Optimization and Value Fluctuation**

There are two value transmission channels for asset structure optimization. The value transmission channel of asset restructuring was examined in the previous article. The relationship between the productive optimisation and adjustment of the asset structure and the market value of the enterprise is examined in this part. Productive optimising and adjusting the asset structure can lead directly to changes in value; through the profit channel, productive adjusting and optimising the firm's asset structure can lead to a correlating adjustment in the firm's market value. The main area of existing research is the value transmission channel of the profit-based asset structure, however, there have been few studies on whether productive asset allocation directly affects a firm's market value. The section focuses on the direct value creation of optimizing the structure of production facilities.

This paper makes the following assumptions based on the above analysis.

Hypothesis 3: The structural optimization of productive assets of listed entities can have an



impact on market value.

Hypothesis 4: There is a positive correlation between the optimisation and adjustment of the asset structure of listed companies and their market value.

### 3.2.1. Production Optimization and Value Response

The production activities of enterprises are the source of profits. This part starts with the structural adjustment of productive assets at the venture level, and studies the impact of production optimisation on value creation. Based on the level of the micro-enterprise, we will focus on whether the optimization of asset structure at the macro level has an impact on the economy.

In order to maintain comparability, the research sample will continue to include listed companies subject to central enterprise supervision from January 2016 to January 2021. Over the period of the sample, there were 228 public companies. In order to study the economic implications of the structural adjustment of production property, there is a need for the selection of companies that have not had a history of asset restructuring. This is because all of the listed companies have suffered asset restructuring events during the sample period, the research sample in this paper consists of 43 listed companies that were unsuccessful in asset restructuring. Select monthly share price returns, monthly asset structure and earnings information of 43 listed companies. The variables are set out in Table 5, with statistical analyses performed using Eviews 10 software.

Table 5: Variable design.

variable	Alternative variable	Expressions
<b>Dependent variable:</b>		
<b>market value</b>	Return on equity (monthly)	huibao
<b>Argument:</b>		
<b>asset structure</b>	Current asset ratio	liubi
	Fixed asset ratio	gubi
	Non-current asset ratio	feibi
<b>Productive structural variables</b>	Inventory current asset ratio	cunliu

### 3.2.2. Unit Root and Cointegration Test

In order to trial the stability of the above statistics, the unit root test is used for analysis. See Table 6 for inspection results.

Table 6: Unit root inspection.

Test hypothesis	Cross-ststistic	Prob.	sections	obs
<b>Common unit root:</b>				
<b>Levin, Lin &amp; Chu t</b>	-7.28032	0.0000	344	5404
<b>Individual unit root:</b>				
<b>Pesaran ShinW -stat</b>	-6.07497	0.0000	344	5404
<b>ADF - Fisher Chi</b>	1268.30	0.0000	344	5404
<b>PP - Fisher Chi</b>	1057.12	0.0000	344	5404

According to the results in Table 6, no unit root exists in either the common unit root test or the individual unit root test, so the data during the sample period is stable.

For testing the long-term stability of the relationship between stock return and asset allocation, a cointegration test is used for the analysis in this paper. The inspection results are shown in Table 7.

According to the results in Table 7, a stable co-integration relationship exists between Huibao (monthly stock return) and diverse variables of asset structure (current ratio, fixed ratio, non-current

ratio and inventory current asset ratio). The findings indicate that listed companies' market value is closely linked to their ability to adjust and optimize their asset structure.

Table 7: Co-integration inspection.

Test variables	Inspection method	t-Statistic	Prob.
Huibao & liubi:	ADF	-3.822900	0.0001
Huibao & gubi:	ADF	-3.831733	0.0001
Huibao & feibi	ADF	-2.400222	0.0082
Huibao & liufeibi	ADF	-3.822900	0.0001
Huibao & cunliu	ADF	-3.422178	0.0003

### 3.2.3. Regression Analysis

Having confirmed the stability of each variable and the existence of a stable co-integration relationship with stock yield, different asset structure variables serve as independent explanations for stock returns of quoted firms. The results of the regression are displayed on Table 8.

Table 8: Single independent variable (including intercept) regression analysis.

variable	liubi	gubi	feibi	cunliu
Coefficient	0.058545	-0.048011	-0.058545	0.032288
t-Statistic	2.306370	-1.951952	-2.306370	1.222883
A.R-squared	0.005882	0.003835	0.005882	0.000678
D.W.	1.892660	1.888030	1.892660	1.877644

Table 8 shows that, among the alternative asset structure variables, the current and non-current asset ratios are significant in explaining monthly equity yields, but the coefficient of the effect is small. The total of current assets and non-current assets is an asset item. In fact, the two ratios are complementary. The impact coefficients of both are therefore positive and negative according to the empirical results. It can be seen that during the sample period, it is acceptable to assume that there is a positive correlation between the adjustment of the asset structure of companies and their market value. The explanation of fixed asset ratio to monthly reporting rate is not significant.

The impact of the productive structure variable - inventory current asset ratio on the monthly return rate is not material, which suggests that the market may fail to recognize that companies are adjusting and optimising their productive asset structure, but take note of the asset structure adjustment tactic of enterprises from a general perspective. Therefore, in the selected sample, we reject hypothesis 3: the structural optimization of productive assets of listed entities can have an impact on market value.

### 3.2.4. Conclusion

This part deeply studies the impact of asset structure adjustment, productive adjustment and other strategies on market returns of listed companies. The research indicates that despite the existence of a stable co-integration relationship between the variables such as current ratio, fixed ratio, non-current ratio and inventory current asset ratio and the monthly rate of return, the capital market focuses on the strategies of listed companies to optimise and adapt the asset structure, based on broadening the scope of information, and does not take enough account of the more specific and detailed strategies for adjusting productive assets.

### 3.3. Profit Media and Market Value

From the perspective of the enterprise's operation cycle, the enterprise's operation and management begins with production activities, ends with sales of goods or services to achieve income or loss, and then starts a new operation cycle. On the basis of the beginning and the end of the operating cycle, it is possible to classify the adjustment of the asset structure in two types: productive adjustment and profit adjustment. The strategy of optimizing the structure of productive assets does not have the attention of the market, so can the strategy of optimizing the structure of profitable assets have a relationship with the market value of companies? This part will focus on this issue. Based on the previous theoretical analysis and empirical research results, the following assumptions are proposed.

Hypothesis 5: The optimization and adjustment of profitable asset structure is positively related to the market value of listed companies.

#### 3.3.1. Profit Medium Variable

Many studies are in agreement that market value is based on company earnings or net income, in particular the normal operating profit of enterprises, that can be relied upon to be sustainable and that is the main driver of market value. Furthermore, a number of studies show that operating profit is also an important profit factor with an impact on market value. In contrast to these existing studies, this paper constructs a new profit medium variable in order to investigate whether the market is able to identify the profitable strategy for optimising the asset structure. The variables are shown in Table 9.

Table 9: Profit Media Variables.

<b>variable</b>	<b>Alternative variable</b>	<b>Expressions</b>
<b>Dependent variable:</b>		
<b>market value</b>	Return on equity (monthly)	huibao
<b>Argument:</b>		
<b>asset structure</b>	Current asset ratio	liubi
<b>Productive structural variables</b>	Inventory current asset ratio	cunliu
<b>Profit medium variable</b>	Profitable current asset ratio	yingliu
	Profitable non-current assets ratio	yingfei

As shown in Table 9, this paper selects the ratio of operating income to current assets and non-current assets as the profit medium variable, and the asset structure and productive structure variables still use the current asset ratio and the inventory current asset ratio as the substitute variables.

#### 3.3.2. Regression Analysis

Take the monthly return rate of stock as the dependent variable, and the ratio of operating profit to current assets (yingliu) and the ratio of operating profit to non-current assets (yingfei) as the independent variables for regression analysis. This indicates whether each independent variable is regressed separately or in combination are included in the regression equation, they have no significant impact on the monthly return rate. In the regression results, the minimum significance probability level of the two profit media variables is also above 22%. In order to avoid duplication, the remaining results will not be reported. The market is unable to effectively identify the profitable strategies for the optimization and adaptation of the asset structure of companies. To improve the stability of concluding, this paper takes the profit medium variable as the independent variable, and

regresses the asset structure quantity and the productive adjustment quantity to analyze whether the enterprise's asset structure adjustment is profit-oriented. The regression results are shown in Table 10.

Table 10: Return Analysis of Profit Media.

<b>Model 1: dependent variable yingliu</b>				
<b>Argument:</b>	Coefficient	t-Statistic	AR.	D.W
<b>Cunliu</b>	0.156316	1.207238	0.325336	0.583563
<b>Liubi</b>	-2.265983	-18.15546		
<b>Intercept C</b>	2.105956	28.26194		
<b>Model 2: dependent variable yingfei</b>				
<b>Argument:</b>	Coefficient	t-Statistic	AR.	D.W
<b>Cunliu</b>	-1.852628	-10.15443	0.338244	0.587859
<b>Liubi</b>	3.322501	18.89273		
<b>Intercept C</b>	0.040172	0.382607		

As shown in Table 10, the inventory current asset ratio has no significant impact on the operating income current asset ratio, but has a significant impact on the operating income non-current asset ratio; The current asset ratio has a significant impact on the operating income current asset ratio (yingliu) and the operating income non-current asset ratio (yingfei), but the impact on the former is negative, while the impact on the latter is positive. The regression results of both models are related to each other, which shows that as the company's current assets grow, a reduction in current assets' contribution to operating income, while the contribution of fixed assets to operating income is increasing. The productive asset structure adjustment strategy represented by adjusting the inventory ratio has no vital effect on the profitability of current assets of enterprises. With the incessant increase of the inventory ratio, the productive asset structure adjustment strategy will have a significantly negative impact on the profitability of long-term assets, thus lowering the profitability of companies. From a theoretical point of view, these empirical conclusions can reasonably explain the objective fact that, in the actual operation and management of companies, the inventory backlog leads to a decrease in profitability.

Both model 1 and model 2 show that the asset structure adjustment of enterprises is profit-oriented. Model 2 is better than model 1 in interpreting the strategy for adjusting the profitability of the company's asset structure. The research carried out so far shows that the market has not paid any attention to the medium variable of profit, which is represented by the ratio of operating income to non-current assets. To determine whether the market is having a major effect on the structure of profitable assets, a regression model using residuals is constructed in this paper, current ratio and inventory current asset ratio of model 2 as independent variables for regression analysis. The results of the regressions show that the current ratio of residual items and inventories does not have a significant impact on the market return, while the current ratio still has a significant impact. Based on the above research, we can see that in the sample period selected in this paper, the rejection hypothesis 5 is true, that is, the optimization and adjustment of the profitable asset structure has nothing to do with the market value of listed companies.

### 3.3.3. Conclusion

This part first studies whether the profit medium variable affects the market value. Secondly, the paper studies whether the profitability adjustment strategy of asset structure has a significant impact on the enterprise's profit media variables. Finally, it studies whether the market returns can recognize whether the asset allocation strategy is profitable and value-driven.

The results of the research show that the capital market has neither focused on the variables used to measure corporate profits, nor paid attention to the profit-making asset structure adjustment strategy, and even cannot distinguish whether the enterprise asset structure adjustment strategy has the profit-driven value-based.

#### 4. Research Conclusion

The asset restructuring of listed companies represents a key transmission mechanism for the non-profit sector. Asset restructurings have an important influence on the adjustment of the asset structure of enterprises. The asset structure of companies varies significantly whether the reorganization is successful or not. However, the market value of listed companies is not significantly affected by this signal of asset structure differences and has not been recognized by the market in the form of effective value signal. These studies show that asset restructuring does not lead to notable changes in market value, which is rooted in absence of long-term constant profit basis for the structural adjustment of non-profit assets.

Through in-depth research on the structure adjustment of productive assets and profitable assets, it is found that it is only from the general information dimension that the capital market recognizes and understands the company's asset adjustment strategy. The capital market neither is attentive to the profit variables of companies, nor can it recognize whether the enterprise's asset structure adjustment strategy has the production optimization orientation or the profit value orientation.

#### References

- [1] Bent Jesper Christensen, Michel van der Wel. *An asset pricing approach to testing general term structure models. Journal of Financial Economics*. 2019. (03).
- [2] V. K. Fal'tsman. *On the Structure, Dynamics, and Use of the Asset Share in the National Wealth. Studies on Russian Economic Development*. 2018, Vol. 29 (5), pp. 462-469.
- [3] David Backus, Nina Boyarchenko, Mikhail Chernov. *Term structures of asset prices and returns. Journal of Financial Economics*. 2018, Vol. (4), pp. 1-23.
- [4] Lei Xintu, Xu Qingyuan. *The impact of regional financial ecological environment on enterprise asset structure - evidence from manufacturing industry. Economic Geography*. 2018 (06): 102-108.
- [5] Zhang Yongji, Meng Qingbin. *Expected inflation and enterprise asset structure. Accounting Research*. 2016 (07): 27-34.
- [6] Meng Qingbin, Zhang Yongji, Jia Junsheng. *Macroeconomic uncertainty and optimal asset structure of enterprises. System Engineering Theory and Practice*. 2019 (02): 286-297.
- [7] Zhang Junrui, Zhang Jianguang, Gao Jie, Li Jinlin. *Asset Structure, Asset Efficiency and Enterprise Value, Management Review*. 2012 (01): 127-138.
- [8] Huang M, Liu S, Zhang Y, et al. *Research on the university intelligent learning analysis system based on AI. Journal of Intelligent and Fuzzy Systems*. 2021(31):1-10.
- [9] Xue, Chen X, Ding H, et al. *Research on Real Time Processing and Intelligent Analysis Technology of Power Big Data. Review of Accounting Studies*, 2017: 43-47.
- [10] L. Martellini, V. Milhau, A. Tarelli, *Capital structure decisions and the optimal design of corporate market debt programs. Journal of Corporate Finance*. 49(2018) 141-167.
- [11] Ma H, Pang X. *Research and Analysis of Sport Medical Data Processing Algorithms Based on Deep Learning and Internet of Things. IEEE Access*, 2019, 7:118839-118849.