Influence of Profitable Media Varibles

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Abstracts: This paper studies how the profitable media variables affect the market perception of asset structure optimization. The conclusions indicate that the market can't confirm them as effective value signals, nor can it distinguish whether the adjustment strategy of asset structure is oriented towards production optimization or profit value.

Keyword: Asset Structure, Profitable Media, Profit Transmission Mechanism and Market Perception

1. Introduction

Transaction costs generate the efficiency boundary between enterprises and markets. Due to cost constraints, some transactions or matters have economic value only when completed within the enterprise, while the market can complete others. With the rapid development of information technology and the beginning of internet area, the cost-centered efficiency boundary is increasingly blurred. The production, possession, dissemination, and cognition of information have become a new boundary between organization and market. Each link of information exchange may shape organizational boundaries, leading to expansion or contraction. From the perspective of information, organizational boundaries always have the characteristics of dynamic changes.

Information related to the optimization and adjustment of enterprise asset structure continues to emerge and spread. Whether the market can directly recognize this information or through media variables are the core issue for the value analysis of enterprise asset optimization strategy. This paper focuses on how the profit-media variables affect the market perception of asset structure optimization to solve this problem and summarizes the research conclusion. The contribution of this paper is that the market cannot distinguish whether the asset structure adjustment strategy has production optimization orientation or profit value orientation.

2. Information Value Transmission of Structural Optimization

2.1. Classification of the Value Transmission Mechanism

The value transmission mechanism of asset structure optimization of state-owned enterprises can be divided into two types: profit transmission mechanism and non-profit transmission mechanism. Profit Transmission Mechanism is the Main Value Transmission Mechanism. The effectiveness of macroeconomic policies is reflected by enterprise asset size, production efficiency, and profitability indicators. Ultimately, the profitability of enterprises is the fundamental guarantee to play the role of state-owned economic macroeconomic policy implementation.

2.2. Profit Transmission Mechanism

The production and operation activities and achievements of listed companies under the jurisdiction of state-owned enterprises are always concerned by other subjects of the capital market and affect the whole capital market. First of all, the size of state-owned listed companies is huge and is the capital market's backbone. The great size and important market position make the profit and loss change of state-owned listed companies itself a market fluctuation. Other related private enterprises will also fluctuate with the fluctuations of state-owned listed companies, resulting in fluctuations in the entire industrial

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chain. Secondly, state-owned listed companies undertake the "political" tasks of many government economic policies or regulatory measures. They are the media and tools for the government to regulate the market and make up for market defects. Therefore, the study of asset structure optimization of profit transmission market mechanism is the main task of this part—tax mechanism and compensation mechanism as control factors, into the market mechanism model construction. The asset structure optimization of state-owned enterprises is divided into two types: productive optimization and strategic optimization. Because the capital market is imperfect information, the capital market has established a significant event disclosure system to alleviate the situation of information asymmetry. In this market situation, only significant strategic asset allocation, structural optimization, and other information can be observed by investors through the disclosure system. The production and management behavior of enterprises is a kind of ' black box ' for the market. It is difficult for investors to observe the production behavior of enterprises directly. Therefore, whether there is a relationship between the optimization of productive asset structure and the market value of enterprises cannot be directly determined, and it needs to be studied through factors such as profitability as intermediate variables.

3. Research Design and Empirical Analysis

3.1. Production Optimization and Value Fluctuation

Asset structure optimization has two value transmission channels. This part studies the relationship between the productive optimization adjustment of asset structure and the market value of enterprises. The productive optimization adjustment of asset structure may directly lead to changes in value. The productive adjustment and optimization of enterprise asset structure can lead to the corresponding adjustment of enterprise market value through profit channels. The value transmission channel of asset structure with profit as the medium is the main field of existing research, but whether the productive optimization of asset structure can cause the immediate change of enterprise market value. This part will focus on the direct value transmission mechanism of productive assets structure optimization.

Based on the above analysis, this paper puts forward the hypothesis:

Hypothesis 1: Productive asset structure optimization of listed companies can affect market value.

Hypothesis 2: The asset structure optimization adjustment of listed companies is positively correlated with market value.

3.1.1. Production Optimization and Value Response

This part starts with adjusting the productive asset structure at the enterprise level to study the value consequences of production optimization. Based on the micro-enterprise level, focusing on the macro level of asset structure optimization has economic consequences.

To maintain comparability, the listed companies under the jurisdiction of central enterprises from January 2012 to January 2017 are still selected as research samples. During the sample period, a total of 228 listed companies. To investigate the economic consequences of adjusting productive assets structure, we select companies that have not undergone asset restructuring events. Because the listed companies have occurred asset restructuring events during the sample period, this paper selects 43 listed companies whose asset restructuring failed as the research sample. Select 43 listed companies' monthly stock returns and monthly asset structure and earnings data. Variable design is as follows in Table 1, using Eviews10 software for statistical analysis.

Variable Substitute Variables Expression Dependent Variable: Market Value Stock Return (Monthly) huibao **Independent Variable: Current Ratio Assets Structure** liubi **Fixed Ratio** gubi Non-Current Ratio feibi **ProductiveStructureVariables Inventory Current Asset Ratio** cunliu

Table 1: Variable Design

3.1.2. Cointegration Test

For testing whether there is a long-term stable relationship between stock returns and asset structure,

this paper adopts a cointegration test to analyze. Test results are in Table 2.

Table 2: Cointegration Test

Variable Test	Test 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

The results of Table 2 show a stable cointegration relationship between SR (monthly stock return) and the variables of asset structure (current ratio, fixed ratio, non-current ratio, and inventory current asset ratio). These results show that the market value of listed companies has a long-term stable relationship with asset structure adjustment and optimization.

3.1.3. Regression Analysis

After determining that each variable is stable and has a stable cointegration relationship with the stock return, different asset structure variables are used to explain the stock return of listed companies alone. The regression results are in Table 3.

Table 3: Single Independent Variable (Including the Intercept) Regression Analysis

Variable	liubi1	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

It can be seen from Table 4 that the current asset ratio and non-current asset ratio in the asset structure substitution variables have significant explanatory power on the monthly return of stocks, but the influence coefficient is small. Current assets and non-current assets are combined as assets. These two ratios are complementary. Therefore, the empirical results show that the impact coefficient of the two is positive and negative. During the sample period, Hypothesis 2 can be accepted. The fixed asset ratio does not explain the monthly report rate significantly.

The effect of production structure variable-inventory current assets ratio on monthly return rate is not significant. This indicates that the market may not be able to identify the adjustment and optimization of the production assets structure of enterprises. However, the market can focus on the adjustment strategy of the assets structure of enterprises from a general point of view. Thus, in the selected sample, refuse to assume 1: listed companies 'productive asset structure optimization can affect market value.

3.1.4. Conclusions

The research shows that although there is a stable cointegration relationship between the current ratio, the fixed ratio, the non-current ratio, and the inventory current asset ratio, and the monthly return. However, the asset market pays attention to the asset structure optimization adjustment strategy of listed companies from a broader information dimension and lacks sufficient attention to the more specific and detailed productive asset adjustment strategy.

3.2. Profitable Media and Market Value

With the beginning and end of the operating cycle as the standard, asset structure adjustment can be divided into two types: productive adjustment and profitability adjustment. The optimization strategy of productive asset structure cannot be concerned by the market, so can the optimization strategy of profitable asset structure be related to the market value of enterprises?

Hypothesis 3: The optimal adjustment of profitability asset structure is positively correlated with the market value of listed companies.

3.2.1. Profit Media Variables

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¹The intercept is not significant when the current asset ratio is an independent variable, while the other variables such as gubi, feibi and cunliu are significant.

Many studies agree that corporate profits or net profits are the basis of market value, especially the regular operating profits of enterprises, which have reliable sustainability and are the fundamental factors affecting market value. In addition, some studies have shown that operating income is also an important profit factor affecting market value. Unlike these existing studies, this paper constructs a new profitable media variable to study whether the market can identify the optimization strategy of profit asset structure. The variables are in Table 4.

Variable	Substitute Variables	Expression	
Dependent Variable:			
Market Value	Stock Return (Monthly)	huibao	
Independent Variable:			
Assets Structure	Current Ratio	liubi	
ProductiveStructureVariables	Inventory Current Asset Ratio	cunliu	
Profitable Media Variable	Profit Current Asset Ratio	yingliu	
	Profit Non-Current Asset Ratio	yingfei	

Table 4: Profit Media Variable

3.2.2. Regression Analysis

The monthly stock returns as dependent variables, operating income current assets ratio (yingliu), operating income non-current assets ratio (yingfei) as independent variables, regression analysis. The regression results showed no significant effect on monthly return whether two independent variables were regressed alone or both were included in the regression equation. The market can not effectively identify the profit asset structure optimization adjustment strategy.

To enhance the stability of the conclusion, this paper takes the variable of profitable media as an independent variable to regress the variable of asset structure and the variable of productive adjustment to analyze whether the asset structure adjustment of enterprise-oriented. The regression results are shown in Table 5.

Model 1: Dependent Variable: yingliu Independent Coefficient t-Statistic AR. D.W Variable: Cunliu 0.156316 1.207238 0.325336 0.583563 Liubi -2.265983 -18.15546 Intercept C 2.105956 28.26194

Table 5: Profitable Media Regression Analysis

Model 2: Dependent Variable: yingfei							
Independent	Coefficient	t-Statistic	AR.	D.W			
Variable:							
Cunliu	-1.852628	-10.15443	0.338244	0.587859			
Liubi	3.322501	18.89273					
Intercept C	0.040172	0.382607					

As table 6 shows, the regression results of the two models are interrelated, which indicating that with the increase of the current assets of enterprises, the contribution of current assets to the business income of enterprises is reduced, and the contribution to the business income created by non-current assets is increased. With the continuous increase of inventory proportion, the adjustment strategy of productive assets structure will significantly reduce the profitability of non-current assets, thereby reducing the profitability of enterprises. These empirical conclusions can reasonably explain the objective fact that inventory backlog leads to the decline of profitability in the actual operation and management of enterprises in theory.

Both model one and model two show that the asset structure adjustment of enterprises has profit orientation. Model 2 has better explanatory power on the profitability adjustment strategy of enterprise asset structure than Model 1. The previous research shows that the market does not pay attention to the profit medium variables represented by the non-current assets ratio of operating income. To further determine whether the market has a significant reflection on the structure of profitable assets, this paper constructs a regression model with residual item, current ratio, and inventory current assets ratio of model 2 as independent variables for regression analysis. The regression results show that the residual term and

the inventory flow ratio have no significant impact on market returns, while the flow ratio still has a significant impact. Based on the above research, during the sample period selected in this paper, the rejection hypothesis 3 holds that the optimal adjustment of profitability asset structure is not related to the market value of listed companies.

3.2.3. Conclusions

The research results show that the capital market neither pays attention to the variable of profitable media of enterprises nor the adjustment strategy of profit-oriented asset structure. It cannot even distinguish whether the adjustment strategy of enterprise asset structure has profit-oriented value orientation.

4. Research Conclusions

This paper analyzes theoretical mechanism of asset structure optimization value transmission: profit transmission mechanism. Through the in-depth study of productive asset structure adjustment and profit asset structure, the capital market only recognizes and understands enterprise asset adjustment strategy from the general information dimension. Although in the era of information technology and the Internet, the information of listed companies is open and transparent, the capital market does not pay attention to the profit media variables of enterprises nor distinguish whether the asset structure adjustment strategy of enterprises has production optimization orientation or profit value orientation.

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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] Muhammad md husin. Efficiency of monetary policy transmission mechanism via profit rate channel for islamic banks in Malaysia, 2013
- [5] G.M., M. van Essen; P.M.J., M.J. Van den Hof; J.D., D. Jansen, Hierarchical Long-Term and Short-Term Production Optimization, 2010
- [6] Yi Gang and Song Wang. The Evolution of China's Financial Assets Structure:1991—2007
- [7] Grace Xing Hu, Jun Pan & Jiang Wang. Chinese Capital Market: An Empirical Overview, 2018
- [8] Herbert Hax. Measuring the Firm's Performance: Accounting Profit versus Market Value
- [9] Olivier Blanchard, Changyong Rhee, Lawrence Summers. The Stock Market, Profit, and Investment [10] 10. Chi-WenJevons Lee. Financial restructuring of state-owned enterprises in China: the case of Shanghai Sunve Pharmaceutical Corporation