Research on the Influence of Major Shareholders' Reduction of Tobacco Related Listed Companies on Enterprise Value: Based on the Intermediate Effect of Financing Constraints

# Research on the Influence of Major Shareholders' Reduction of Tobacco Related Listed Companies on Enterprise Value: Based on the Intermediate Effect of Financing Constraints

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Objectives: Compared with ordinary consumer goods, tobacco and tobacco products have their particularity, which not only plays an important role in the economic development of all countries in the world, but also plays a different role in people's daily life. In China, the production and sales of tobacco leaves, cigarettes and other tobacco products as well as related tobacco machinery and raw and auxiliary materials have an important impact on fiscal revenue. As the Chinese stock market has basically completed the share-trading reform, stocks that were originally restricted from circulation have begun to circulate. With the continuous increase in the number of lifted bans, the phenomenon of major shareholders reducing their shareholding is also happening constantly. Methods: the paper provides empirical evidence to avoid the adverse effects of major shareholders' reductions on the promotion of corporate value of listed tobacco Enterprises. From the perspective of the flow of shares after the major shareholders reduce their holdings, with the help of the theory of financing constraints, the article uses an empirical analysis method to explore the effect of the major shareholders of listed tobacco Enterprises on the value of the reduced listed private companies after they reduce their holdings. Results: the results show that when the equity of listed tobacco Enterprises is acquired by state-owned enterprises after the reduction of major shareholders, that is, when state-owned enterprises participate in the shares, the reduction of major shareholders contributes to the increase of the value of tobacco Enterprises. And the larger the reduction proportion of major shareholders, the greater the value of the enterprise. However, when major shareholders reduce their holdings and the equity is acquired by investment institutions and small and medium shareholders, it is not conducive to the improvement of corporate value. Especially when major shareholders maliciously reduce their holdings, it would have an adverse impact on the company's development and stock price. Conclusion: therefore, from the perspective of enterprise value appreciation, no matter what the purpose is for major shareholders to reduce their holdings, the flow of equity to state-owned enterprises after the reduction is the best choice. The financing constraints of the enterprise could be reduced and it helps enhance the value of the enterprise.

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Compared with ordinary consumer goods, tobacco and tobacco products have their particularity. This particularity makes it not only occupy an important position in the economic development of all countries in the world, but also play a special role in people's daily life. In China, a very important part of fiscal revenue is contributed by the production and sales of tobacco, cigarettes, other tobacco products, related raw and auxiliary materials and tobacco processing machinery. According to statistics, in 2020, China's tobacco industry achieved a cumulative sales revenue of more than trillion yuan and a profit of more than 200 billion yuan. The tax revenue of the tobacco industry accounts for% of the national fiscal revenue, and the listed companies attached to the tobacco industry are far less than the railway petroleum communication industry. At present, domestic tobacco industry companies mainly focus on cigarette label and cigarette paper industry.

For the asset portfolio, the tobacco industry represented by tobacco listed companies is non cyclical and has investment value as a part of the asset portfolio. For investors, due to different expected return on investment and investment cycle, they have different risk tolerance. Tobacco listed companies have relatively stable cash flow and dividend ratio, which meet the requirements of some investments for risk return. At the same time, the return on capital of listed companies is affected by different market factors and changes from time to time. Investing in stocks with relatively low risk in a certain period of time, after a certain period of time, its return on capital may change greatly due to the rise or fall of risk. Therefore, before making investment decisions, investors need to understand the development status, risk factors and sustainable profitability of invested enterprise. This requires us to first analyze the tobacco industry, combined with the current situation of the whole macroeconomic industry, clarify the growth stage of the tobacco industry, and then combined with the economic operation of each enterprise, compare the commonness and individuality of the industry, analyze the differences, and make scientific and effective investment decisions.

In the current A-share market, with the expansion of the capital market, the reduction of holdings by major shareholders occurs frequently. Many scholars believe that such behavior would disturb the order of the financial market, especially a negative effect on the minority shareholders and enterprise value of tobacco Enterprises would has been caused by the reduction of holdings by major shareholders of listed tobacco Enterprises. The mainly ways of the reduction of holdings by major shareholders: secondary market reductions, block trade reductions, equity transfers, etc. However, each kind of reduction has a different impact on corporate value. Based on the research of ownership structure and the reduction behavior of major shareholders, it has been found that the reduction of major shareholders of state-owned holding companies could enhance the enterprise value, while the reduction of major shareholders of non-state-owned holding companies would have a negative impact on the enterprise value. At the same time, studies have found that the sale of shares by major shareholders would cause the stock price of individual stocks to fluctuate, which in turn affects the company's operating performance, infringes on the interests of small and medium investors, and might even damage the company's image. The research also has found that, in some specific circumstances, the reduction of major shareholders could deliver benefits to the company. For instance, the major shareholders would use their own resources to support the development and operation of the company by selling their shares.

#### **METHODS**

## Theoretical Analysis and Research Hypothesis

Concentration of equity is an important indicator to measure the stability of a company. In the daily operation process, the size of the company, company performance, preference for control rights and political factors are all influencing factors. Huang (2019)1 found that from the perspective of shareholding ratio, analyzing the total shareholding ratio of the major shareholders of a listed company to the total share capital, it could be found that the higher the shareholding ratio of the company's major shareholders, the more concentrated the equity. Then the company's major shareholders have stronger control over the company. From the perspective of shareholding structure, ownership concentration could reflect the shareholding ratio between controlling shareholders and noncontrolling minority shareholders in an enterprise. If the equity is concentrated in the controlling shareholder, they have greater decision-making power over the company, and the company is less likely to be affected by external maliciousness.

At present, the definition of financing constraint has not been unified in the relevant research. However, there are similarities in the various studies. There is no such thing as an ideal capital market in which companies can raise sufficient external financing according to their own needs. Due to the information asymmetry in the market and various complex external factors, there are certain differences in corporate financing costs, which lead to the existence of financing constraints.

Feng (2010)<sup>2</sup> pointed out that financing constraint means that the difference between internal and external financing of an enterprise restricts the enterprise's access to external funds. Financing constraint is a universal social phenomenon, which is faced by both capitalist market and socialist market. The imperfection of the market leads to the generation of financing constraints. There are some similarities between

"financing constraint" and "financial distress", and the main difference is that enterprises with financing constraint will have differences in investment risk and return matching. The financing constraint mentioned in this paper refers to that, in the "imperfect" capital market, the influence of internal and external financing factors on the investment decisions of enterprises is different, and it has been taken as the control variable.

Han (2011)<sup>3</sup> pointed out that it is the first thing to determine the positioning of enterprise value, which plays an important role in the evaluation of enterprise value. In general, corporate value refers to the value of the company as a whole. However, different scholars have different understandings of corporate value. According to Sun (2019)<sup>4</sup>, the analysis is mainly based on the characteristics of economic activities and participants that create enterprise value. Based on the Angle of business economic behavior, the enterprise value is defined by combining the current profit situation of the enterprise with the future profit prospect, that is, considering the actual expected development. The enterprise value can be understood as the enterprise's current operating condition and the development potential of the enterprise. Based on the behavioral differences of the participants, the values of the owners, the potential customers, and the existence of the employees and the society of the enterprise are taken as the basis to judge the value of the enterprise. Because enterprises possess both economic and social organizational characteristics, their economic and social behaviors influence and restrain each other.

## An Emprical Study on the Impact of Reduction of Major Shareholder's Holdings on Corporate Value

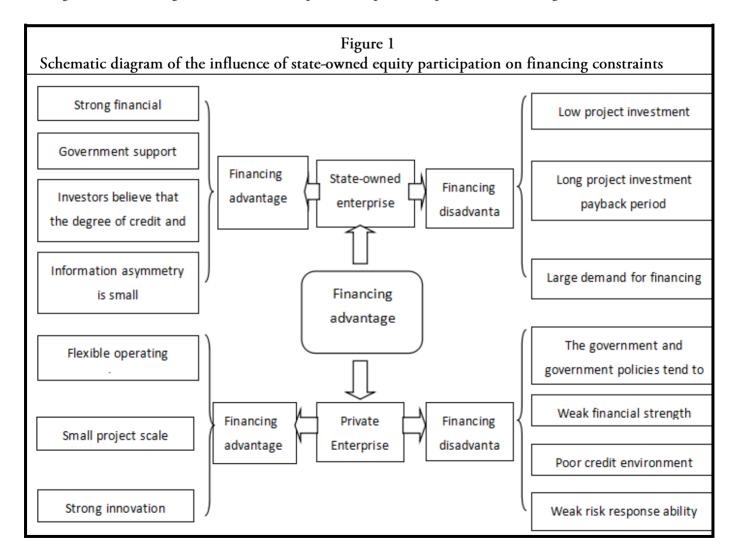
According to the above research of the article, it has been found that the flow of shares held by major shareholders of tobacco Enterprises would have a certain impact on the value of tobacco Enterprises. In order to explore how the reduction of major shareholders of tobacco Enterprises affects the value of tobacco Enterprises, the article has proposed two hypotheses based on the flow of equity after major shareholders of tobacco Enterprises reduce their holdings: a. The shareholdings reduced by major shareholders flow to

state-owned enterprises; b. Inflows to institutional investors, small and medium shareholders.

At the same time, in order to measure the impact of the reduction of major shareholders on the value of tobacco Enterprises, the paper has taken financing constraints as an intermediary variable. The specific utility of the financing constraint variable could be explained as follows: when the financing constraint becomes smaller due to the reduction of the holding, the financing channel of the enterprise would be broadened, which is conducive to the improvement of the enterprise value. However, when the reduction in holdings strengthens financing constraints, corporate

financing channels become narrower, and corporate value decreases accordingly.

When the shareholding reduction of major shareholders flows into state-owned enterprises, namely, state-owned equity participation could promote the creation of enterprise value by the enterprise. The participation of state-owned enterprises has greatly increased their reputation in society, and banks and large financing institutions would also be more inclined to lend money to such enterprises. Increasing the confidence of market investors in the company is conducive to the stability of the company's stock price, thereby increasing the company's market value. The specific impact is shown in Figure 1.



Theoretical Analysis and Research Hypothesis

The reduction of major shareholders' holdings is transformed into state-owned equity, namely, the

proportion of state-owned equity increases, which changes its information asymmetry, degree of credit and guarantee, and government support. As a result, the financing capacity of the enterprises has been enhanced, that is, financing constraints have been reduced. Companies with a higher degree of nationalization will have more advantages in financing than companies with a higher degree of non-nationalization. The marginal financing cost of a company with a higher degree of nationalization is also lower than that of a company with a higher degree of non-nationalization. It could be seen that the increase of state-owned equity can improve the financing environment of enterprises with high degree of denationalization and reduce the financing cost of enterprises. At the same time, enterprises would have more diversified financing methods, and their competitive advantages in financing loans would also increase. The financing constraint of the enterprise becomes smaller, which is conducive to improving the performance of the company. hypothesis 1 is proposed:

Hypothesis 1: For tobacco Enterprises, when the shares reduced by major shareholders are transferred to state-owned enterprises, it is conducive to enhancing the value of the company. And as the proportion of major shareholders reduces their holdings, the greater the corporate value will be improved<sup>5</sup>.

In order to verify whether Hypothesis1 is reasonable, the hypothesis is proposed from the following aspects through regression analysis:

When state-owned equity participates in tobacco Enterprises, the investment target income of the enterprise will be more concentrated on the economic value creation of the enterprise. This is conducive to the production and operation behavior of enterprise and the profit-seeking nature of corporate strategic decision-making<sup>6</sup>. At the same time, the participation of state-owned shares would optimize and reform the ownership structure of enterprises. Most nationalized enterprises would choose to disclose the contents of

and future dividends, which would improve the visibility and credibility of the enterprises. This will help to improve the confidence of market investors in tobacco Enterprises, and is conducive to the stability of the stock price of enterprises, thus improving the market value of enterprises. Based on the above analysis, the following hypotheses are proposed:

Hypothesis 1a: State-owned equity participation will enhance the value of the company.

State-owned enterprises have more advantages in financing than non-state-owned enterprises, and the marginal financing cost of state-owned enterprises is also lower than that of non-state-owned enterprises. It could be seen that the participation of state-owned equity and tobacco Enterprises would form complementary, improve the financing environment of tobacco Enterprises. As a result, the financing cost of enterprises would be reduced, the financing methods would be more diversified, the competitive advantage in financing loans would also be increased, and the financing constraints of enterprises would be smaller.

Hypothesis 1b: The increase in the proportion of state-owned equity will reduce the financing constraints of the enterprise.

Enterprise financing is a hot issue that researchers pay close attention to. According to different financing methods, it could be roughly divided into three situations: bank credit, equity financing and bond financing.

Firstly, bank credit as the way of enterprise financing has been discussed. When banks lend to tobacco Enterprises, the asset status, debt repayment ability, and credit status of enterprises usually have been assessed. It is understood that when ordinary tobacco Enterprises and tobacco Enterprises with state-owned shares handle loans at the same time, banks will be more inclined to lend to tobacco Enterprises with state-owned shares. Because of the stability of state-owned enterprises, the creditworthiness of enterprises in banks is higher, and the success rate of obtaining bank credit is also higher. Through searching the literature, it is found that compared with state-owned enterprises, tobacco Enterprises have significant credit constraints. These constraints are caused by the characteristics of tobacco

reform

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Enterprises and will reduce the total factor productivity of tobacco Enterprises.

Secondly, equity financing as the way of enterprise financing has been discussed. In the process of enterprise financing, tobacco Enterprises will encounter the problem of narrow channels of equity financing. Compared with state-owned enterprises, tobacco Enterprises are more difficult to obtain equity financing and the cost of financing is higher<sup>10</sup>. Therefore, many tobacco Enterprises have to use equity pledge for financing, which leads to the increase of financing costs and financing risks for tobacco Enterprises. China is still in the primary stage of socialism and its market economy is in the immature stage of development. under the situation that the Therefore, development of the equity market is not perfect, and medium-sized enterprises outstanding problems such as financing difficulties and expensive financing.

Thirdly, bond financing as the way of enterprise financing has been discussed. Corporate bond issuance is an important way of equity financing. With the continuous development of China's bond market, the scale of issuing bonds by tobacco Enterprises is also expanding. According to the data, the corporate bonds of tobacco Enterprises are shrinking continuously while the bonds issued by state-owned enterprises are expanding. tobacco Enterprises have a series of problems such as difficulty in guarantee and financing in the process of enterprise financing.

Firstly, the proportion of tobacco Enterprises issuing credit enhancement bonds is even greater. Most of the tobacco Enterprises are private investment, and the level of corporate bond issuers is generally AA or below. In order to increase the success rate of financing, tobacco Enterprises have a higher proportion of credit-enhancing bond issuance when issuing bonds. At the same time, its issuance cost is also higher than that of non-credit-enhancing bonds, which will inevitably lead to an increase in the financing costs of private corporate bonds.

Secondly, the long-term operational stability and debt solvency of tobacco Enterprises have a low degree of recognition. In order to alleviate the pressure on short-term funds, companies generally choose to issue medium and long-term bonds. At the same time, the issuance of medium and long-term bonds also has certain requirements for the operational stability of corporate issuers. However, according to data, in terms of the bond issuance period, tobacco Enterprises are shorter than state-owned enterprises, which is also a manifestation of the low recognition of the long-term operational stability and debt solvency of tobacco Enterprises. This has also contributed to the difficulty of private enterprise bond financing to a certain extent.

Thirdly, it is found that there is implicit government guarantee premium in state-owned enterprises. State-owned enterprises can rely on the government to maintain low issuance costs. However, the cost of issuing bonds for tobacco Enterprises without the government's implicit guarantee premium is significantly higher than that of state-owned enterprises.

Finally, from the perspective of investor psychology, investors generally trust state-owned enterprises because they have state-owned shares, and are more inclined to buy state-owned enterprise bonds.

The improvement of enterprise quality and value is closely related to capital investment. When an enterprise achieves a certain financing effect, namely, the capital has a certain amount of investment, the enterprise is more confident to increase its own value, and the road of enterprise value improvement becomes smoother. At the same time, according to the research, when the enterprise value increases, the investment enthusiasm of investors will be correspondingly improved, and then help the enterprise to achieve further financing, enhance the enterprise value, and achieve a virtuous circle.

Hypothesis 1c: The level of enterprise value will increase due to the reduction of financing constraints.

# When equity flows into institutional investors, small and medium shareholders after major shareholders reduce their holdings

When the equity after the reduction of major shareholders is held by investment institutions and other

small and medium shareholders, the shareholding structure of the enterprise will be more dispersed. As a result, the stock market volatility and stock price volatility might be caused, which will eventually lead to a reduction in its financing volume, thereby reducing the value of the company. Therefore, it can be considered that the reduction of major shareholders' holdings may lead to a continuous and irreversible decline in stock prices in the future, which means that stocks depreciate. Changes in stocks mean changes in corporate value, so such assumptions can be made.

Hypothesis 2: When the equity reduced by major shareholders of tobacco Enterprises is dispersed by investment institutions, small and medium-sized shareholders, etc. It is not conducive to the increase of the company's value, and the greater the percentage of major shareholders reduction, the greater the impact on corporate value<sup>7</sup>.

In order to verify whether hypothesis 2 is reasonable, the hypothesis is proposed from the following aspects through regression analysis:

To some extent, the behavior of major shareholders to reduce their shareholding conveys the signal of the decline of enterprise value. From the perspective of signal transmission, if the major shareholder of an enterprise reduces its holdings and flows the reduced shares into the secondary trading market, negative information will be transmitted to the market and the market value of the enterprise will be reduced<sup>8</sup>.

Hypothesis 2a: When the shares reduced by major shareholders are held separately by investment institutions, small and medium shareholders, etc., the value of the enterprise will be reduced.

There will be a series of chain reaction to the reduction of major shareholders. When they reduce their holdings maliciously, the stock price of the company will fluctuate greatly, which will hurt the confidence of outside investors and reduce investors' expectation of risk sharing by major shareholders. This leads to wild speculation as to whether there is any major change or breach of

discipline, which leads to reduced liquidity of shares, making it harder and more expensive for companies to raise capital, and banks will also reassess when lending. As a result, corporate financing constraints will intensify.

Hypothesis 2b: When the equity reduced by major shareholders is dispersedly held by investment institutions, small and medium shareholders, etc., it will increase the financing constraints of the enterprise.

The improvement of enterprise quality and value is closely related to capital investment. When the company cannot obtain a certain amount of financing or the financing cost is too high, the company will be more willing to choose to maintain its current status, which will result in the failure to increase the value of the company. The reduction of major shareholders will be dispersed to investment institutions and small and medium shareholders, and the concentration of corporate equity will decrease. Increasing corporate financing constraints will lead to a decrease in corporate value.

Hypothesis 2c: Due to the increase in financing constraints, the level of corporate value of listed companies will decrease.

#### Research Design

The paper mainly studies the direction of equity of large shareholders of tobacco Enterprises after reducing their holdings, and the time span of data selection is large. Moreover, since the relevant data of enterprises before 2000 are not perfect, the form of reducing holdings is not relevant to the research of this paper. In order to ensure the reliability of the empirical study, more than 2,000 private A-share listed companies in China from 2001 to 2018 were selected from the CSMAR database.

The variables set in this paper are divided into four categories: explained variable, explanatory variable, intermediary variable and control variable.

Explanatory variable: State-owned shares (SHRS). Comparing state-holding enterprises with tobacco Enterprises will find that the government will be more inclined to state-holding enterprises. This makes state-owned enterprises have an advantage over tobacco

Enterprises in terms of bank loan financing and capital market equity financing.

Investment institutions, small and medium shareholders are non-state equity participation (IP). In the paper, the form of transfer to investment institutions and medium and small shareholders after the reduction is called non-state-owned equity participation. Under this circumstance, the flow of shares reduced by major shareholders is more scattered, and the company's shareholding after reduction is less concentrated. In bank loan financing, capital market equity financing, it does not have an advantage, but will magnify financing constraints.

Mediating variable: KZ index. Financing constraint refers to the situation where the internal financing cost is greater than the external financing cost due to asymmetric information and agency costs. At the same time, the degree of financing constraint of enterprises is positively correlated with information asymmetry. In order to improve enterprise value, enterprises should reduce financing constraints. This paper selects financing constraints as an intermediary variable to test the relationship between state-owned share participation and enterprise value and its role.

Explained variable: Corporate value. The paper uses another variable Tobin's Q value to reflect the true value of the enterprise. (Tobin's Q value: the ratio of the market value of a company to the replacement cost of capital, showing a positive correlation with investment expenditures.)

Control variables: Enterprise size, leverage, financial leverage ratio. Variable selection and definition are shown in Table 1. The Tobin Q value used comes from the CSMAR database.

## Model Building

According to Hypothesis 1: For tobacco Enterprises, when the equity reduced by major shareholders is transferred to state-owned enterprises, it is conducive to the improvement of corporate value, and the larger the reduction

proportion of major shareholders is, the greater the improvement of corporate value will be. The test verifies the existence of H1a, H1b and H1c by testing the regression coefficient and carrying out three-stage significance analysis.

H1a (the first stage): the significance of state-owned shares to the value of the enterprise;

H1b (the second stage): the influence of state-owned shares on the intermediary variables (financing constraints);

H1c (the third stage): Introduce variables: stateowned shares participation and intermediary variables (financing constraints) to test the significance of stateowned shares participation and financing constraints.

The hypothesis can only be established if the significance of the three stages is verified at the same time<sup>8</sup>.

In order to test H1a, the explanatory variable is stateowned equity participation (SHRS), and the explained variable is enterprise value (Tobin Q). Other control variables that may affect enterprise value: enterprise size, debt ratio, financial leverage ratio, etc. Build the model (1) as:

$$\begin{split} TobinQ_{it} &= \beta_0 + \beta_1 TobinQ_{i(t-1)} + \beta_2 SHRS_{it} + \\ & \beta_3 CON + E_{it} \quad (1) \end{split}$$

In order to test H1b, the financing constraint (KZ\_A) is set as the explained variable, the explanatory variable is selected as state-owned equity participation (SHRS), and the model is obtained after considering the control variables:

$$SHRS_{it} = \beta_0 + \beta_1 SHRS_{i(t-1)} + \beta_2 KA_Z_{it} + \beta_3 CON + E_{it}$$
 (2)

In order to test H1c, set up the following conditions:

The enterprise value (Tobin Q) has been set as the explained variable, the state-owned equity participation (SHRS) has been set as the explanatory variable, the financing constraint (KZ\_A) has been set as the intermediary variable, and adds the control variable to construct a model:

$$TobinQ_{it} = \beta_0 + \beta_1 TobinQ_{i(t-1)} + \beta_2 SHRS_{it} + \beta_3 KA_2 Z_{it} + \beta_4 CON + E_{it}$$
(3)

Similarly, hypothesis 2: In tobacco Enterprises, when the reduced equity held by major shareholders is

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dispersed by investment institutions and minority shareholders, it is not conducive to the improvement of corporate value. And the larger the reduction proportion of major shareholders, the greater the impact on enterprise value. It is consistent with the hypothesis 1: For tobacco Enterprises, when the shares reduced by major shareholders are transferred to state-owned enterprises, it is conducive to increase the value of the company, and the greater the proportions of major shareholders reduce, the greater the value of the company will be improved. It is only necessary to replace the explanatory variable of the proportion of state-owned shares (SHRS) with the proportion of non-state-owned shares (IP).

#### **RESULTS**

## **Correlation Analysis**

As shown in Table 2, the state-owned shareholding ratio has a significant correlation with Tobin's q value at the 0.05 level, and the r value is -0.42, which is close to the negative correlation. The KZ index with financing constraints has a significant correlation at the 0.01 level, and the r value is -0.21, the negative correlation is weak.

#### Regression analysis

Empirical analysis based on hypothesis 1 flowing into state-owned enterprises, verification of H1a has been done.

According to Table 3 and Table 4, it can be concluded that enterprise value is the explained variable, and state-owned equity participation is the explanatory variable. It can be seen that the result of p is 0, both LLCI and ULCI are negative, and the lower and upper limits of the 95% confidence interval do not include 0, and the model is significant. H1a has been corroborated, showing that state-owned equity participation in enterprises will affect the value level of the enterprises themselves.

Empirical analysis based on hypothesis 1 flowing into state-owned enterprises, verification of H1b has been done.

According to Table 5 and Table 6, it can be concluded that financing constraint is the explanatory variables, and state-owned equity participation is the explanatory variable. It can be seen that the result of p is 0, both LLCI and ULCI are positive, and the lower and upper limits of the 95% confidence interval do not include 0, and the model is significant. H1b has been corroborated, indicating that state-owned equity participating enterprises will reduce the financing constraints of the enterprises themselves.

Empirical analysis based on hypothesis 1 flowing into state-owned enterprises, verification of H1c has been done.

According to Table 7 and Table 8, it can be concluded that enterprise value has been set as an explanatory variable, state-owned equity participation is set as an explanatory variable, and financing constraints are set as an intermediary variable. Taking into account the influence of other factors, the enterprise size, debt ratio, and whether it is privately owned enterprise, financial leverage ratio and other control variables. The results show that p is 0, LLCI and ULCI are both positive values, and the lower and upper limits of the 95% confidence interval do not include 0, and the model is significant. H1c has been corroborated, indicating that the reduction of financing constraints will increase the value of tobacco Enterprises.

It can be concluded that the model effect is remarkable. Therefore, the conclusion established through the hypothesis 1 empirical study concluded that for tobacco Enterprises, when the equity reduced by major shareholders is transferred to state-owned enterprises; it is beneficial to enhance the company's value. And the greater the proportion of major shareholders reducing their holdings, the greater the value of the company will be enhanced<sup>10</sup>.

An empirical analysis based on hypothesis 2 flowing into non-state-owned enterprises

In the same way, according to the model of hypothesis 1, empirical analysis is carried out, and the following conclusions are drawn:

Empirical analysis based on hypothesis 2 flowing into non-state-owned enterprises, verification of H2a has been done.

Table 1
Variable Selection and Definition

Туре	Name	Symbol	Definition
Турс	State-owned equity participation ratio	SHRS	The total proportion of state-owned shares in the total capital of the enterprise
Explanatory variables	Proportion of non-state- owned equity participation	IP	The equity after outflow shall be dispersed by investment institutions and small and medium-sized enterprises, which shall account for a total proportion of the total capital of the enterprise
Mediating variable	Financing constraints	KZ_A	Indicates the degree of financing constraints
Explained variable	Corporation value	Tobin Q	Represents the enterprise value, which is equal to (market value of tradable shares at the end of the year + market value of nontradable shares + market value of net liabilities at the end of the year)/ total assets at the end of the year
	Enterprise size	Size	
Control variable	Debt ratio	Leverage	
variabic	Financial leverage ratio	DR	

Table 2 Correlation Analysis Results

		Total proportion of state-owned shares	Tobin Q	KZ_A
	Pearson correlation	1	42*	34**
Total proportion of state-owned shares	Sig. (two-tailed)		.017	.000
state-owned shares	Number	13452	12478	11947
	Pearson correlation	42*	1	84**
Tobin Q	Sig. (two-tailed)	.017		.000
	Number	12478	12478	11947
	Pearson correlation	34**	84**	1
KZ_A	Sig. (two-tailed)	.000	.000	
	Number	11947	11947	11947

<sup>\*.</sup> At the 0.05 level (two-tailed), the correlation is significant.

Table 3
The value test of state-owned shares to the enterprise (1)

R		R-sq	MSE	F	df1	df2	P
.089	2	.0080	1.9457	46.9174	5.0000	29216.0000	.0000

Data source: Calculated based on data from CSMAR database

<sup>\*\*.</sup> At the 0.01 level (two-tailed), the correlation is significant.

Table 4
The value test of state-owned shares to the enterprise (2)

					1 ( )	
	coeff	se	t	p	LLCI	ULCI
constant	-2.8659	.1484	-19.3063	.0000	-3.1568	-2.5749
SHRS	0052	.0005	-10.3854	.0000	0061	0042
Size	0389	.0068	-5.7199	.0000	0522	0256
Leverage	0019	.0007	-2.6302	.0085	0033	0005
IP	1006	.0223	-4.5029	.0000	1443	0568
DR	0054	.0016	-3.4106	.0000	0085	0023

Table 5

Test of Financing Constraints on State-Owned Shares Participation (1)

R	R-sq	MSE	F	df1	df2	P
.8891	.8067	24.4015	20722.5225	6.0000	29142.0000	.0000

Table 6

State-owned Shares' Participation in Financing Constraints Test (2)

			1			
	coeff	se	t	p	LLCI	ULCI
constant	14.7433	.5262	27.8413	.0000	13.7267	15.7631
SHRS	.0132	.0018	8.0558	.0000	.0125	.0178
KZ_A	4242	.0207	-21.3703	.0000	4433	3710
Size	7167	.0241	-28.6183	.0000	7651	6716
Leverage	0033	.0025	-1.3070	.1912	0073	.0017
IP	.9287	.0791	11.7345	.0000	.7726	1.0838
DR	1.9656	.0056	348.8641	.0000	1.9436	1.9668

Table 7

State-Owned Shares Participation and Financing Constraints on the Enterprise Value Test (1)

R	R-sq	MSE	F	df1	df2	p
.8999	.8098	24.4215	20732.6265	6.0000	29215.0000	.0000

Table 8

State-Owned Shares Participation and Financing Constraints on the Enterprise Value Test(2)

	coeff	se	t	p	LLCI	ULCI
constant	14.7453	.5292	27.8613	.0000	13.7079	15.7826
SHRS	.0142	.0018	8.0548	.0000	.0107	.0176
KZ_A	4226	.0207	-20.3903	.0000	4633	3820
Size	7189	.0241	-29.8183	.0000	7661	6716
Leverage	0033	.0025	-1.3070	.1912	0083	.0017
IP	.9287	.0791	11.7345	.0000	.7736	1.0838
DR	1.9656	.0056	348.8641	.0000	1.9546	1.9767

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According to Table 9 and Table 10, it can be concluded that enterprise value is the explained variable, and non-state-owned equity is the explanatory variable. It can be seen that the result of p is 0, both LLCI and ULCI are negative, and the lower and upper limits of the 95% confidence interval do not include 0, and the model is significant. Hypothesis 2a has been corroborated, showing that non-state-owned equity participating enterprises will affect the value level of the enterprise.

Empirical analysis based on hypothesis 2 flowing into non-state-owned enterprises, verification of H2b has been done.

According to Table 11 and Table 12, it can be concluded that financing constraint is the explanatory variable, and non-state equity participation is the explanatory variable. It can be seen that the result of p is 0, both LLCI and ULCI are negative, and the lower and upper limits of the 95% confidence interval do not include 0, and the model is significant. Hypothesis 2b has been corroborated, indicating that non-state-owned equity participating enterprises will increase the financing constraints of the enterprises themselves.

Empirical analysis based on hypothesis 2 flowing into non-state-owned enterprises, verification of H2c has been done.

According to Table 13 and Table 14, it can be concluded that enterprise value is set as an explanatory variable, non-state-owned equity participation is set as an explanatory variable, and

financing constraints are set as an intermediary variable. Taking into account the influence of other factors, the enterprise size, debt ratio, and financial leverage are added. Control variables such as ratios. The results show that p is 0, LLCI and ULCI are both negative values, the lower and upper limits of the 95% confidence interval do not include 0, the model is significant. Hypothesis 2c has been corroborated, indicating that the increase in financing constraints will reduce the value of tobacco Enterprises<sup>11</sup>.

It can be concluded that the model effect is remarkable. Therefore, the conclusion established through the Hypothesis 2 empirical study concludes that for tobacco Enterprises, when the shares reduced by major shareholders are transferred to non-state-owned enterprises, it is not conducive to enhancing the value of the company. And the larger the reduction proportion of major shareholders is, the greater the decline of corporate value level will be.

#### Robustness Test

In order to ensure the reliability of the research results, this article starts with the explained variables. The enterprise value (Tobin's Q value) mentioned above is based on the ratio of the enterprise's market value to the replacement cost of capital, and has a positive correlation with investment expenditures. The signs of variable coefficients such as corporate value, proportion of state-owned equity participation, and financing constraints are changed and significant, which is consistent with the previous conclusions, indicating that the research results have a certain degree of robustness...

Table 9 Test of the Value of Non-state-owned Shares to the Enterprise (1)									
	R	R-sq	MSE	F	df1	df2	p		
	.0306	.0009	2.2351	12.8360	1.0000	13735.0000	.0000		
	Tes	st of the Val	ue of Non-s	Table 10 tate-owned S	Shares to the	Enterprise	(2)		
		coeff	se	t	р	LLCI	ULCI		

	constant	-3.8188	.0137	-278.4855	.0000	-3.8457	-3.7920
	IP	0100	.0028	-3.5827	.0000	0155	0045
	Size	0257	.0108	-4.688	.0000	0357	0244
	Leverage	0009	.0004	-1.6677	.0073	0022	0003
_	DR	0023	.0016	-2.5187	.0000	0075	0016

Table 11

### Non-state-owned Shares' Participation in Financing Constraints Test (1)

	R	R-sq	MSE	F	df1	df2	p
_	.1222	.0149	49.4198	102.6870	2.0000	11876.0000	.0000

Table 12

## Non-state-owned Shares' Participation in Financing Constraints Test (2)

	coeff	se	t	p	LLCI	ULCI
constant	.4312	.1662	2.5939	.0000	6467	1054
IP	0046	.0131	3534	.0000	0453	0211
KZ_A	5790	.0401	-14.4306	.0000	5675	5004
Size	4537	.0178	-25.6832	.0000	5325	3427
Leverage	0021	.0019	9754	.1712	0014	.0023
DR	1.3665	.0043	337.5398	.0000	1.4657	1.6432

Table 13

## Non-state-owned Shares Participation and Financing Constraints on Enterprise Value Test (1)

	R	R-sq	MSE	F	df1	df2	р
-	.1222	.0149	49.4198	104.1251	2.0000	13734.0000	.0000

#### Table 14

### Non-state-owned Shares Participation and Financing Constraints on Enterprise Value Test (2)

		coeff	se	t	p	LLCI	ULCI
	constant	.4312	.1662	2.5939	.0000	7571	1054
	IP	0046	.0131	3534	.0000	0304	0211
	KZ_A	5790	.0401	-14.4306	.0000	6576	5004
	Size	4537	.0178	-25.6832	.0000	4524	3427
	Leverage	0021	.0019	9754	.1712	0023	.0017
	DR	1.3665	.0043	337.5398	.0000	1.6231	1.6432
Note courses Calculated based on data from CSMAD database							

Data source: Calculated based on data from CSMAR database

#### **DISCUSSION**

When Stocks Reduced by Major Shareholders Flow Into State-Owned Enterprises When the stocks reduced by the major shareholders flow into the state-owned enterprises, it is equivalent to the equity participation of the state-owned enterprises, which will increase the value of the enterprises. After state-owned equity participation, the corporate equity

structure has changed from a purely private enterprise to a state-owned equity enterprise, and the image and credibility of the enterprise will be improved due to the participation of state-owned equity. At the same time, the shareholding structure of the company will change, which will help stabilize the stock price of the company and increase the value of the company accordingly. In addition, state-owned equity participation will reduce corporate financing constraints. After stateowned equity participation, the credit and reputation of the enterprise has increased, and the degree of information asymmetry between the enterprise and the bank and other financial institutions in loan financing has decreased. The financing channels of enterprises have been broadened, and the financing constraints of enterprises have been reduced. Finally, it helps enterprises to reduce the resistance when financing loans. With the expansion of the amount of capital invested by the enterprise, the operating efficiency of the enterprise has improved, which will help the promotion of enterprise value.

Therefore, when the majority shareholder's shareholding reduction is controlled by a state-owned enterprise, the state can appropriately support the measure and help the enterprise develop better. At the time of China's economic transformation, state-owned equity investment in tobacco Enterprises can take advantage of different equity capital to enhance corporate value, which is of great significance for promoting the reform of corporate mixed ownership and sustainable development.

## When Stocks Reduced by Major Shareholders Flow into Non-state-owned Enterprises

When the shares reduced by major shareholders are acquired by non-state-owned enterprises, institutional investors or small and medium-sized investors, the negative market effect is far greater than the positive market effect, which intensifies the risk of stock price volatility. Moreover, the larger the reduction ratio is, the larger the equity inflow

to investors will be, and the greater the financing constraints of the enterprise will be. This will make it difficult to raise funds, which is not conducive to the promotion of enterprise value.

Among the forms of major shareholder reductions, there is a malicious reduction of major shareholders. Among them, many companies speculate through preconcepts and reduce their holdings when the stock price rises sharply. This may imply that listed companies have a valuation bubble. What's more, the major shareholders deliberately raise the stock price and then reduce their holdings to make a profit. Some companies change their performance immediately after major shareholders reduce their holdings. This behavior will aggravate the volatility of the stock market and is not conducive to the sustainable development of the market. In response to this behavior, relevant government agencies can exercise restraint and control from the following aspects.

## Improve the accuracy of disclosed information

In order to protect business secrets, most listed companies in China are unwilling to publish too much information about their operations. Therefore, the accuracy of the information might be improved, especially the financial report, which is one of the main ways to understand the business status and profitability of a company. Without increasing the disclosure content, increasing the reliability of the disclosed information can reduce the risk of information asymmetry to a certain extent<sup>9</sup>.

# Increase the illegal cost of maliciously reducing holdings

Existing laws and policies are far from enough to penalize such violations. According to relevant information, the current maximum amount of economic penalties in China is only 600,000 yuan. However, major shareholders maliciously reduced their holdings and cashed in as much as 100 million yuan. Such a low cost of crime is not worth mentioning to major shareholders who maliciously reduce their holdings, and it will also make them dismissive of punishment. If the penalties are increased, the cost of violations will increase. Before they want to maliciously

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reduce their holdings, they will also think about the possible consequences of this behavior, which has a deterrent effect. In addition to increasing economic penalties, if major shareholders commit other behaviors that disrupt the normal order of the market in order to reduce their holdings maliciously. According to the degree of damage, other sanctions can be introduced, and serious behaviors can be sentenced to fixed-term imprisonment to increase the cost of crime.

#### Introduce relevant legal system

The state should introduce a series of laws and regulations regulating the reduction of major shareholders' holdings, which can play a deterrent effect and effectively reduce vicious reductions in holdings. However, due to the greater subjectivity in qualitative sentencing, fairness and justice cannot be truly achieved. The penalty measure of quantitative fines can be written into the legal system<sup>12</sup>.

#### Improve the relevant regulatory system

As early as the beginning of the last century, various countries issued a series of laws and regulations on the issue of major shareholders' shareholding reduction, forming a relatively complete regulatory system. For example, detailed regulations have been made on how to reduce shareholding, the amount of shareholding reduction, and so on. In Hong Kong's stock market<sup>10</sup>, the requirements for information disclosure of major shareholders of listed companies are more stringent. These measures have regulated the reduction of major shareholders' holdings to a certain extent. At the same time, China needs to learn from an excellent and mature regulatory mechanism, and combine its own actual market conditions to improve the current regulatory system and establish a legal and orderly trading market.

#### **Author Declaration**

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#### References

- 1. Jiani H. Research on Ownership Concentration, Corporate Strategy and Financial Performance. Guangxi University.2019.
- 2. Yun F, Hongtao G. Analysis on the Causes of Financing Constraints of Private Enterprises——From the Perspective of Financial Development . Economic Research Guide. 2010,34:86-88.
- 3. Zhengmin H. The Application of Economic Profit EVA in the Quantitative Evaluation of Enterprise Value. China Business Trade. 2011, 14: 251-252.
- Dawei S. Research on the Influence of State-owned Equity on Enterprise Value Creation under the Orientation of Mixed Ownership. Beijing University of Technology. 2018.
- Dandan Z. Research on the Motivation and Economic Consequences of Major Shareholders' Reduction -- A Case Study of Zhangqu Technology. China University of Mining and Technology. 2019.
- Dawei S. Research on the Influence of State-owned Equity on Enterprise Value Creation under the Orientation of Mixed Ownership. Beijing University of Technology. 2018.
- 7. Jing H. Major Shareholders' Reduction of Holding and Enterprise Value Information Transmission. North China Electric Power University. 2019.
- 8. Ruijie T. Research on Enterprise Value under the Reduction of Major Shareholders ——Taking X Enterprise as an Example. Lanzhou University of Finance and Economics. 2019
- 9. Zhihao Lin. Reasons for the frequent malicious reduction of holdings by major shareholders and its prevention. CO-Operative Economy Science. 2018,03: 136-137.
- 10. Genping C. A case analysis of major shareholders' illegal shareholding reduction of Quantong Education on the Growth Enterprise Market. Jiangxi University of Finance And Economics. 2018.
- 11.Erinoso Olufemi, Welding Kevin, Cohen Joanna E, Smith, Katherine. Cigarette Pack Structure Elements in Low- and Middle-Income Countries. Tobacco Regulatory Science jan. 2021.
  - https://www.ingentaconnect.com/contentone/trsg/trs/202 1/0000007/0000001/art00006
- 12. D'Angelo, Heather; Ayala, Guadalupe X.; Gittelsohn, Joel; Laska, Melissa N.; Sindberg, Lesley Schmidt; Horton, Lucy; Kharmats, Anna Y.; Ribisl, Kurt M.An Analysis of Small Retailers' Relationships with Tobacco Companies in 4 US Cities. Tobacco Regulatory Science. January 2020.

https://www.ingentaconnect.com/contentone/trsg/trs/2020/000 00006/00000001/art00001

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