

Study on Tax Risk Assessment of Listed Enterprises in Cultural Media Industry

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Abstract: Cultural industry plays a positive role in promoting the optimization of China's industrial structure and upgrading of consumption. As an active subject in the market economy, listed cultural media enterprises are the main force in the cultural industry and bear the burden of developing and growing China's cultural industry. This paper takes 50 listed enterprises in China's cultural media industry as research samples and analyzes the main financial indicators from 2019-2020 through multiple regression linear analysis to examine the factors influencing the tax risk of China's cultural media industry, and finds that indicators such as industry income tax burden, VAT tax burden and gross profit rate are significantly positively correlated with the overall tax burden of enterprises, fixed asset turnover rate and asset burden ratio are significantly negatively correlated with the The relationship between total asset turnover rate and overall tax burden of listed cultural media enterprises is not significant. It has a certain significance for the early warning of the tax burden of the Chinese cultural media industry

Keywords: Cultural media, Tax risk, Tax burden, Multiple regression analysis

1. Introduction and Literature Review

With the continuous development of China's economy, the per capita disposable income continues to grow, the consumption structure as a whole shows an upgrading trend, and the demand for cultural products becomes more and more intense. Cultural industry mainly relies on creativity and technology, and is an emerging industry under the strategy of developing the country with science and technology and strengthening the country with talents. As a new economic growth point, the cultural industry meets the requirements of environmental protection and green. The cultural industry can be dissected by studying the listed cultural media enterprises. Therefore, studying the tax burden of listed cultural media enterprises in China, analyzing the factors affecting the tax burden of listed cultural media enterprises, and finding ways to reduce the tax burden of cultural media enterprises are of great practical significance to promote the operation of listed cultural media enterprises and support the development of China's cultural industry. The research in this paper has -certain research value for improving the tax preferential policies of China's cultural industry and reducing the tax burden of listed cultural media enterprises.

Wang Zhixin (2020) found that the strongest influence effect is the issue of tax business environment by studying the business environment of culture and media industry ^[1]. Tan, Guangrong and Wang, Xian (2012) used fixed effect model for empirical evidence and found that reasonably controlling and reducing the income tax burden of enterprises is an effective way to control the tax risk of enterprises ^[2]. Cao, Xiaoli and Luo, Jianying et al. (2009) studied the VAT risk of 15 listed enterprises in the retail industry and concluded that there is a significant correlation between VAT tax variance rate and sales gross margin variance rate ^[3]. Liu and An Changying (2012) analyzed the current situation of tax risks of real estate enterprises by tax types and found that corporate tax analysis was not significantly correlated with gearing ratio, but with total asset turnover rate, total asset return rate and enterprise size ^[4]. Previous studies involving tax research in the cultural media industry are sparse, and the innovation of this paper is the comprehensive use of financial indicators for analysis and the use of multiple regression empirical analysis to analyze the tax risks of listed enterprises in China's cultural media industry with novel industry directions.

2. Research design

2.1 Data sources

In this paper, listed enterprises in the cultural media industry from 2019 to 2020 were selected as the research sample for empirical analysis. In the sample selection, the following sample selection criteria were followed for better correlation between data and better data analysis: listed enterprises with mutilated data were removed; all companies that were ST in that year were excluded; and enterprises with a return on net assets of 0 were excluded. Finally, a total of 50 enterprise samples and 100 annual samples were selected. The samples selected in this paper are all from Oriental Fortune, and the specific sample data are obtained from Juchao Information Network, and SPSS24.0 is used for statistical analysis.

2.2 Definition of variables

According to the relevant regulations of tax laws and the availability of data, seven representative independent variables are selected, including: corporate income tax burden (X_1), VAT tax burden (X_2), balance sheet ratio (X_3), fixed asset turnover rate (X_4), total asset turnover rate (X_5), gross profit rate (X_6), and total asset growth rate (X_7), which reflect the degree of tax burden, solvency, profitability, and profitability of cultural media enterprises, respectively. The overall tax burden of enterprises (Y) was selected as the dependent variable, and the system of tax risk evaluation variables for listed enterprises in the cultural media industry is shown in Table 1.

Table 1: Tax risk evaluation variables system of listed enterprises in cultural media industry

Variable	Formulas
Corporate tax burden (Y)	(Value-added tax paid in the current period + income tax paid in the current period + business tax and surcharges)/main business income $\times 100\%$
Corporate income tax burden(X_1)	Income tax paid in the current period/main business income = (income tax expense-deferred income tax expense + beginning balance of enterprise income tax payable-ending balance of enterprise income tax payable) / main business income $\times 100\%$
VAT burden(X_2)	Actual value-added tax paid in the current period/main business income $\times 100\%$
Assets and liabilities (X_3)	Total liabilities/total assets $\times 100\%$
Turnover rate of fixed assets(X_4)	Main business income/total average current assets
Turnover rate of total assets(X_5)	Net operating income / total average assets $\times 100\%$
Gross margin(X_6)	Gross profit/sales revenue = (sales revenue-sales cost)/sales revenue $\times 100\%$
Growth rate of total assets(X_7)	Growth of assets in the current period/total assets at the beginning of the year $\times 100\%$

2.3 Modeling

In order to analyze the relationship between corporate income tax burden, value-added tax, asset-liability ratio, fixed asset turnover rate, total asset turnover rate, gross profit margin and total asset growth rate, and the overall tax burden of listed companies in the cultural media industry, this article uses multiple linear regression. The model is used to conduct empirical analysis on the influencing factors of the explained variables. The model design is as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + \varepsilon$$

Where a_0 is the intercept term, i denotes the i th company, t denotes different years in 2019 and 2020, and ε is the error term. The meaning of each relevant variable is shown in the variable definition section

3. Empirical tests and analysis

3.1 Descriptive statistics and correlation analysis

Table 2 shows the descriptive statistics of all variables. In the tax variables, the average corporate tax burden Y is 2.751%, the median is 1.270%, and the standard deviation is 3.130%, indicating that most companies have a large overall tax burden, and the overall tax burden of each company varies greatly.

Table 2: Descriptive statistics table

Variables	Minimus	Maximum	Median	Mean	Standard deviation	Variance
Corporate tax burden (Y)	0.230	20.950	1.270	2.751	3.130	9.800
Corporate income tax burden(X ₁)	-0.250	20.850	0.390	1.615	2.846	8.099
VAT burden(X ₂)	0.000	7.190	0.250	0.560	1.056	1.116
Assets and liabilities(X ₃)	5.710	74.260	31.475	31.935	14.267	203.546
Turnover rate of fixed assets(X ₄)	0.280	331.260	7.805	44.307	77.745	6044.287
Turnover rate of total assets(X ₅)	0.080	3.600	0.500	0.634	.562	0.316
Gross profit margin(X ₆)	5.570	93.220	35.485	36.444	17.211	296.239
Total assets growth rate(X ₇)	-23.370	182.420	6.760	11.999	26.306	692.022

In the financial indicators, the value of the company's asset-liability ratio X₃ is 31.935%, while Xiao Meiqiu and Huang Xiaobo (2019) analyzed the data of my country's listed companies from 1993 to 2017 and found that the average value of the listed company's asset-liability ratio was 45.4%, indicating that my country's culture The asset-liability ratio of listed media companies is lower than the average level of listed companies in my country, and the asset-liability ratio is not high.

Pearson correlation analysis of various variables through SPSS24.0 found that the asset-liability ratio and total asset turnover rate are significantly negatively correlated with the overall corporate tax burden, and the correlation between the remaining five variables and the overall corporate tax burden is significantly positive related.

3.2 Regression analysis

The preliminary regression results of the multiple regression model established in the previous paper are shown in Table 3, using SPSS24.0.

Table 3: Table of regression results

Model	Non-standard coefficient of Dissimilation		Standardization Modulus	t	Significance
	B	Standard error	Beta		
(Constant)	0.697	0.202	3.455	0.001	
X ₁	1.013	0.019	0.921	54.709	0.000
X ₂	1.071	0.051	0.361	21.080	0.000
x ₃	-0.004	0.004	-0.017	-0.826	0.038
x ₄	-0.002	0.001	-0.040	-20.389	0.019
x ₅	-0.120	0.113	-0.021	-1.057	0.293
x ₆	0.001	0.003	0.006	0.348	0.039
X ₇	0.004	0.002	0.030	1.930	0.049

R²=0.982 Adjusted R²=0.980

The analysis of the data shows that the tolerance is close to 1, the VIF value is small, the conditional index is less than 0, and the characteristic root is not equal to 0. These factors indicate that there is no multicollinearity between the variables selected in this paper, the regression model of this paper does not have the problem of covariance.

It can be seen from Table 3 that the correlation coefficient of the corporate income tax burden is 1.101, and there is a significant positive correlation at the 1% level. That is, the corporate income tax burden is the largest, and the overall tax burden level is higher. Similarly, its value-added tax burden is also related to the corporate income tax burden is significantly positively correlated at the 1% level.

The correlation coefficient of the asset-liability ratio is -0.004, which is significantly correlated at the 5% level, indicating that the asset-liability ratio is significantly negatively correlated with the overall tax burden of listed cultural media companies. The greater the asset-liability ratio, the smaller the overall corporate tax burden, and the smaller the asset-liability ratio, the greater the overall corporate tax burden. Generally, the asset tax burden of cultural media companies should not be too large. The average debt ratio is 31.934%, which is within a reasonable range.

The correlation coefficient of the fixed asset turnover rate is -0.002, which is significantly correlated at the 5% level, indicating that the fixed asset turnover rate is significantly negatively correlated with the overall corporate tax burden. The correlation coefficient of total asset turnover is -0.12, but the regression result is not significant.

The correlation coefficient of gross profit margin is 0.01, which is significantly correlated at the 5% level, indicating that profitability is significantly positively correlated with the comprehensive tax rate of listed cultural media companies. The gross profit margin reflects the profitability of an enterprise, and a higher gross profit margin indicates a stronger profitability. Listed cultural media companies with strong profitability generally have higher profits and incomes. They are one of the key tax sources of the Chinese government, and therefore will be subject to the focus of attention and supervision by the tax authorities. Therefore, tax evasion is difficult to occur, and the overall tax rate of listed cultural media companies with strong profitability is also higher.

The correlation coefficient of the growth rate of total assets is 0.004, which is significantly correlated at the level of 5%, indicating that the total asset-liability ratio is significantly positively correlated with the overall tax burden of listed companies in the cultural media industry. A higher growth rate of assets means a stronger enterprise development capability.

4. Conclusion

Through the empirical research on the tax influencing factors of listed enterprises in China's culture and media industry, this paper draws the following conclusions.

First, the overall tax burden of listed cultural media enterprises is related to both tax factors and financial indicators. Corporate income tax burden, VAT tax burden, gross profit rate and total asset growth rate are significantly and positively related to the overall tax burden of listed cultural media enterprises, fixed asset turnover rate and asset burden ratio are significantly and negatively related to the overall tax burden of listed cultural media enterprises, and the relationship between total asset turnover rate and the overall tax burden of listed cultural media enterprises is not significant.

Secondly, the level of gearing of listed cultural media enterprises in China is not high, and the level of gearing is lower than the average gearing level of listed enterprises in China.

Third, gross profit rate is significantly and positively related to the overall tax burden of listed cultural media enterprises. Its reflects the profitability of the enterprise. The listed cultural media enterprises with higher profitability generally also have higher profits and revenues, and are one of the key tax sources for our government, so they are subject to the key attention and supervision of tax authorities. Therefore its tax evasion is difficult to occur, then the overall tax burden rate of the listed cultural media enterprises with high profitability is also higher.

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