



A Study on the Impact of ESG Performance on Financing Ability of Tourism Listed Companies

Yuchun Zhou

Sichuan Agricultural University, Sichuan, China

1813101449@qq.com

Abstract. Based on the financial data of 25 Shanghai and Shenzhen A-share listed tourism companies from 2014-2021, this paper empirically examines the impact of ESG performance on corporate financing ability. The study shows that: (1) the ESG performance of China's listed tourism companies significantly and positively affects the financing ability of enterprises, and the effect is heterogeneous; (2) the regression of financing constraint as a threshold variable finds that the effect holds when the financing constraint is less than 2.6189, and the opposite effect is not significant.

Keywords: ESG; tourism listed companies; financing capacity

1 Introduction

Since environmental issues began to attract attention in the 1970s, the concept of ESG has emerged as a result of the growing global focus on environmental, social and governance sustainability issues. ESG (Environment, Society, Governance) is a comprehensive consideration of corporate social responsibility and sustainability factors in investment and ESG is an investment and risk management approach that takes into account corporate social responsibility and sustainability, and is a new concept for assessing corporate value. Currently, more and more listed companies are publishing ESG reports to disclose and evaluate their ESG to improve transparency and to let investors understand the sustainability status of the company. Tourism listed companies with good ESG performance can gain higher trust and support from investors and financial institutions, which helps to reduce capital cost and optimize financing structure. Therefore, in the context of sustainable development, it is of practical importance to study whether the overall ESG performance of listed tourism companies can influence their financing costs ^[1].

2 Literature review

Tourism listed companies are a hot topic that has been widely studied in recent years. Relevant studies have focused on the study of operating performance and financial status, financing channels and investment decisions [2]. Corporate governance of Chinese tourism listed companies was divided into board independence and equity concentration [3], and a significant positive relationship with financial performance was found [4]. With the gradual popularization of the ESG investment concept, more and more studies have focused on the performance of listed tourism companies in this area. By exploring the impact of ESG factors on the market value of tourism companies, George found that it is generally consistent with the value enhancement theory [5]. This is mainly reflected in the following aspects: ESG performance can promote market value [6], reduce bond credit spreads [7], and improve corporate financing ability [8]. There is still a lack of research on the impact of ESG performance of listed tourism companies on financing ability. This paper enriches the research in related fields to a certain extent and has practical reference significance for the sustainable development of tourism listed companies.

3 Theoretical analysis and research hypothesis

A report published by the World Economic Forum WEF (2020) shows that tourism is one of the three sectors most affected by ESG risks and opportunities. Excellent ESG performance may make it easier for companies to obtain low-cost debt financing from financing institutions, which is often seen as a more reliable and low-risk investment. Investors and partners may also prefer companies with better ESG performance because it may be related to the company's creditworthiness.

H1: Good ESG performance of listed tourism companies can enhance the financing ability of the companies.

Scenic category, hotel category and comprehensive category tourism listed companies have different business attributes and different main audience groups. The companies have different regional distribution, different economic development status, tourism resource endowment and transportation, and different resilience of major events impact, which may lead to different impact of ESG performance on the company's financing ability [9]. Therefore, different evaluation criteria, considerations and focus on ESG have different impacts on financing, which can affect financing decisions.

H2: There is heterogeneity in the impact of ESG performance of listed tourism companies on their ability to raise capital.

High financing constraints may make it difficult for firms to carry out the necessary financing activities, thus affecting their growth and investment plans. When the degree of information asymmetry is reduced, the marginal increment of investors' willingness to provide capital is higher [10] and the financing constraint becomes smaller [11]. Tourism listed companies can cause financing constraints for tourism firms due to the uncertainty of economic policies [12]. When the financing constraint faced by enterprises

is too high, investors and partners, etc. will pay more attention to other factors that cause high financing constraint of enterprises.

H3: Financing constraint has a threshold effect in the influence of ESG performance of listed tourism companies on corporate financing ability.

4 Research design

In order to avoid the impact of the introduction of the new tourism law in 2013 on the business of listed tourism companies, this paper selects the data of listed tourism companies from 2014-2021, the list is showend in table 1. For the initial data, the following treatments were carried out: (1) eliminated ST*PT sample companies; (2) eliminated companies with missing relevant financial data, and finally 25 sample companies were obtained. The research data are mainly obtained from the CSMAR database.

Table 1. Sample List

code	stock	code	stock	code	stock
1	000069.SZ	10	002033.SZ	19	600593.SH
2	000428.SZ	11	002059.SZ	20	600637.SH
3	000430.SZ	12	002159.SZ	21	600655.SH
4	000524.SZ	13	002627.SZ	22	600706.SH
5	000610.SZ	14	300144.SZ	23	601007.SH
6	000721.SZ	15	600054.SH	24	601888.SH
7	000802.SZ	16	600138.SH	25	603099.SH
8	000888.SZ	17	600258.SH		
9	000978.SZ	18	600358.SH		

The explained variable FA represents the financing cost of listed tourism companies, which is measured by leverage with reference to existing studies^[13]. This indicator is a negative indicator, the higher the gearing ratio of the enterprise, the higher the financing cost of the enterprise, and the worse the financing ability.

The explanatory variables of this paper are ESG performance of listed tourism companies. The CSI ESG rating system is used. The index system is based on the index scores, and finally nine ratings from C to AAA are obtained and assigned 1 to 9, respectively, from which the variable ESG is obtained^[14]. The higher the score, the better the ESG performance of the firm.

5 Empirical analysis

5.1 Baseline regression and robustness tests

Table 2 shows the regression results of ESG performance of listed tourism companies on their gearing ratio without and with the inclusion of control variables, respectively. The regression coefficients of ESG performance of tourism listed companies on their gearing FA show a negative correlation at the 1% significance level, indicating that the

improvement of ESG performance of tourism listed companies will promote the reduction of gearing, which is conducive to the enhancement of corporate financing capacity [15], thus verifying H1.

Table 2. regression results

FA	re	fe	ols	SYS-GMM	Robust test
ESG	-0.025*** (0.007)	-0.025*** (0.007)	-0.024*** (0.009)	-0.042* (0.024)	
L.ESG					-0.027*** (0.008)
liq	-0.042*** (0.006)	-0.033*** (0.006)	-0.069*** (0.011)	-0.092*** (0.021)	-0.029*** (0.006)
grouth	0.071*** (0.019)	0.059*** (0.018)	0.057* (0.033)	0.050 (0.041)	0.051*** (0.020)
stock	0.001 (0.001)	0.004*** (0.001)	-0.001 (0.001)	0.001 (0.002)	0.004** (0.002)
ROE	-0.361** (0.178)	-0.521*** (0.167)	0.356 (0.387)	-1.236* (0.314)	-0.490*** (0.172)
ROA	0.455 (0.303)	0.802*** (0.288)	-1.046 (0.649)	1.710* (0.515)	0.677** (0.296)
ln_asset	0.047*** (0.011)	0.065*** (0.016)	0.044*** (0.008)	0.062*** (0.021)	0.069*** (0.019)
_cons	-0.518** (0.238)	-1.031*** (0.350)	0.007 (0.683)	-0.683* (0.396)	-1.121*** (0.428)
R2_w	0.4724	0.5009	0.6062		0.4914
Hansen				9.05[0.989]	
AR(1)				-2.29[0.022]	
AR(2)				-0.09[0.932]	
N	194	194	194	194	171

Note: Standard errors in parentheses, * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$, the following tables are as.

Table 2 shows the regression results of ESG performance of tourism listed companies on their asset liability ratio using Stata software to calculate four different econometric regression models: random effects model, fixed effects model, least squares method, and system GMM model. Considering that the lag variable of ESG is not easily affected by the performance of the current period, a robustness test is conducted using ESG lag of 1 period as the explanatory variable. According to the result in table 2, the regression coefficient between the ESG performance of tourism listed companies and the asset liability ratio FA shows a negative correlation at different levels of significance, which means that for every 1 unit increase in ESG performance of tourism listed companies, the asset liability ratio will decrease by 2.5%. This indicates that an increase in ESG performance of tourism listed companies will promote a decrease in the asset liability ratio, which is beneficial for reducing the cost of corporate debt financing. Thus, it has achieved a significant improvement in the financing ability of enterprises, thus verifying hypothesis 1.

5.2 Heterogeneity Analysis

According to the Guidelines on Industry Classification of Listed Companies issued by CSRC in 2001, listed tourism companies are classified categories: scenic category, hotel category and comprehensive category. According to the table3, it can be seen that the ESG of tourism listed companies in the scenic area category has the greatest influence on corporate financing ability, probably because the ESG concept focuses on the need for companies to focus on ecological and environmental protection, fulfill social responsibility and improve governance, which is crucial for tourism listed companies in the scenic area category. And the hotel category tourism listed companies are not significant in this influence may be because for this category of companies, other criteria such as star rating, user evaluation, and service quality are more valuable in reference to corporate financing ability. The sample of listed tourism companies is divided into eastern, central and western regressions, the results shows that for every 1 unit increase in ESG performance in eastern and central regions, the financing ability of companies can be improved by 1.7% and 8%, while companies in western regions are not significant. The reason may be that the eastern and central regions have better economic development, more financing opportunities and more supportive policy environment, while the western region has relatively single financing channels and financing methods. Hypothesis 2 was tested.

Table 3. Heterogeneity Analysis

FA	comprehensive	scenic	hotel	eastern	central	western
ESG	-0.016*	-0.068***	0.030	-0.017**	-0.080**	-0.013
	(0.009)	(0.018)	(0.027)	(0.008)	(0.030)	(0.011)
control	yes	yes	yes	yes	yes	yes
_cons	-0.328	-0.701	-3.249**	-1.251***	1.041	-5.831***
	(0.444)	(1.128)	(1.102)	(0.419)	(1.271)	(1.085)
R2_w	0.5417	0.7160	0.8315	0.6223	0.7051	0.7774
N	107	55	32	93	45	56

5.3 Threshold effect test

The threshold analysis of the threshold variable of financing constraints was conducted using Stata, and the KZ index inside the CSMAR database was used as a proxy, and the threshold effect test was obtained by Boot-strap self-sampling 300 times. Firstly, three thresholds were conducted for testing, and it was found that the p-value was significant only for a single threshold, and the results of the double threshold test were the same. The threshold value and confidence interval obtained from the single threshold test are shown in Table 4, and it was found that the financing constraint had a single threshold effect with a threshold value of 2.6198.

Table 4. Threshold effect from sampling test results

var	RSS	MSE	λ	F	95%CI
KZ	0.4084	0.0024	2.6198	19.05 ***	[2.5459,2.7159]

Table 5 is the regression based on the threshold value corresponding to the threshold variable financing constraint. When the KZ index is less than 2.6198, ESG has a significant negative effect on FA, which is consistent with the main effect of this paper, and the improvement of ESG performance of listed tourism companies can significantly improve the financing ability of enterprises. The effect is not significant when the KZ index is greater than 2.6198. Hypothesis 3 is verified.

Table 5. Threshold effect from sampling test results

FA	Coef.	Robust Std.Err.	t	P>t	controls
ESG(KZ \leq 2.6198)	-0.020	0.008	-2.55	0.019	yes
ESG(KZ $>$ 2.6198)	-0.007	0.007	-0.94	0.360	yes
Cons_	-1.119	0.291	-3.85	0.001	yes

6 Conclusions

Based on the financial data of listed tourism companies from 2014-2021, this paper empirically tested the impact of their ESG performance on corporate financing ability. The study shows that: (1) the ESG performance of China's listed tourism companies significantly and positively affects the financing ability of enterprises, and the effect is heterogeneous; (2) the regression of financing constraint as a threshold variable finds that the effect holds when the financing constraint is less than 2.6189, and the opposite effect is not significant. Based on there findings, the following insightful suggestions can be obtained:

First, listed tourism companies should focus on their performance in ESG. Enterprises should expand the scope of ESG information disclosure and carry out regular ESG reports to improve transparency and inform investors about their sustainability development; implement ESG risk management system; carry out green investment and green financing through green financial tools such as green bonds and green credit to enhance their green innovation capability^[16].

Second, the Chinese government should gradually improve its policy and institutional measures in ESG, encourage enterprises to actively implement ESG management. It should establish a sound and reasonable investment management system and reduce the level of information asymmetry by upgrading the Internet and supporting digital finance^[17].

References

1. Mei, Y. L., Zhang, Q. (2023) The impact of ESG performance on the cost of corporate debt financing. *Finance and Economics*, 02:51-63. doi:10.19622/j.cnki.cn36-1005/f.2023.02.005.
2. Lv, J.Y., Zhang A.L., Zhen, X.Y. (2023) Does the level of regional digitalization affect the efficiency of corporate investment? --Empirical evidence from listed tourism companies. *Finance and Accounting Newsletter*, 04: 35-39. doi: 10.16144/j.cnki.issn1002-8072. 2023.04.011.
3. Peng, H.S., Zhang J.H., Zhong S.E., Li, P.Z., (2021) Corporate governance, technical efficiency and financial performance: Evidence from Chinese listed tourism firms. *Journal of Hospitality and Tourism Management*, 48. doi: 10.1016/J.JHTM.2021.06.005.
4. Yang, J.B., (2011) A Study on the Factors Influencing the Operating Performance of Chinese Tourism Listed Companies: An Analysis Based on Corporate Governance Perspective and Unbalanced Panel Data. *Tourism Science*, 25(02):73-84. doi: 10.16323/j.cnki.lykx.2011.02.002
5. George H. Ionescu, D.F., Ramona, P., Ruxandra, D.V., (2019). The impact of ESG factors on market value of companies from travel and tourism industry. *Technological and Economic Development of Economy*, 5. doi:10.3846/tede.2019.10294.
6. Fuadah, L.L., Mukhtaruddin, M., Andriana, I., Arisman, A., (2022). The Ownership Structure, and the Environmental, Social, and Governance (ESG) Disclosure, Firm Value and Firm Performance: The Audit Committee as Moderating Variable. *Economies*, (12). doi:10.3390/ECONOMIES10120314.
7. Lian, Y.H., Ye T., Zhang, Y.Y., Zhang, L., (2023). How does corporate ESG performance affect bond credit spreads: Empirical evidence from China. *International Review of Economics and Finance*, (85). doi: 10.1016/J.IREF.2023.01.024.
8. Luo, C.H., Wei, D.L., He, F., (2023). Corporate ESG performance and trade credit financing – Evidence from China. *International Review of Economics and Finance*, (85). doi: 10.1016/J.IREF.2023.01.021.
9. Ma, X.F., Liu, Y.J., (2014) Spatial and temporal differences in the operating performance of listed companies in scenic spots and the influencing factors. *Economic Geography*, 34(12): 194-200. doi: 10.15957/j.cnki.jjdl.2014.12.029.
10. Xu, L.G., (2021) Transparency of earnings information, financing constraints and corporate technological innovation. *Friends of Accounting*, 01:38-43. <https://kns.cnki.net/kcms/detail/14.1063.F.20201227.1004.012.html>
11. Zhang, Y.M., (2021) Corporate ESG performance, financing constraints, and green technology innovation. *Business Accounting*, No.707(11):33-39. <https://kns.cnki.net/kcms/detail/detail.aspx?FileName=SYKI202111008&DbName=CJFQ2021>
12. Wang, J.P., (2022) Economic policy uncertainty, strategic differences and corporate cash holdings: An analysis of data from a sample of listed tourism companies. *Finance and Accounting Newsletter*, No.905(21):45-48+69. doi: 10.16144/j.cnki.issn1002-8072. 2022. 21.006.
13. Sun, J.J., Peng, F. (2019) An empirical test of the impact of financial development and R&D investment on the financing ability of private enterprises. *Statistics and Decision Making*, 35(05):185-188. doi: 10.13546/j.cnki.tjyj.2019.05.042.
14. Wang, X.H., Luan, X.Y., Zhang, S.P., (2023) Corporate R&D investment, ESG performance and market value - moderating effect of corporate digitalization level. *Scientific Research*, 41(05): 896-904+915. doi: 10.16192/j.cnki.1003-2053.202206006.001.

15. Li, J.L., Yang, Z., Yi, J.L., (2023) Does ESG performance help reduce the cost of corporate debt financing? --Micro evidence from listed companies. *Corporate Economics*, 42(02):89-99. doi:10.13529/j.cnki.enterprise.economy.2023.02.009.
16. Xiang, D., Wei, R.J., (2022) ESG disclosure, media attention and corporate green innovation. *Wuhan Finance*, 09:61-71. <https://kns.cnki.net/kcms/detail/detail.aspx?FileName=YHQY202209007&DbName=CJFQ2022>
17. Lv, J.Y., Zhang, A.L., Zhen, X.Y., (2023) Does the level of regional digitalization affect the efficiency of corporate investment? --Empirical evidence from listed tourism companies. *Finance and Accounting Newsletter*, No. 912(04):35-39. doi: 10.16144/j.cnki.issn1002-8072.2023.04.011.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

