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The Relationship between Capital Structure, Agency Costs, and Corporate Financial Performance – Empirical Evidence from Chinese Listed Tourism Companies

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Introduction

In China, tourism is increasingly becoming an emerging strategic pillar industry and an industry of livelihood and happiness with remarkable epochal characteristics. The tourism industry has become an important engine for pulling economic development. In the process of building a strong tourism country, tourism enterprises are an important force in promoting the high-quality development of tourism and play a key role. Reasonable capital structure enables enterprises to allocate resources more effectively, reduce financial risks, and provide support for sustainable development. The research on the relationship between capital structure and financial performance has been a hot issue in the academic world, and no consistent conclusion has been formed so far. To summarize, the existing researches mainly focus on the relationship between capital structure and financial performance, which has certain limitations for tourism enterprises. In order to better solve such problems, this paper constructs a theoretical analytical framework of capital structure, agency costs and financial performance, broadens the analytical ideas of existing research, examines the intermediary mechanism of agency costs in the impact of capital structure on financial performance, and conducts an empirical study with Chinese listed tourism companies as the object of research.

Methodologies

This paper employs an empirical research method, using listed tourism companies from 2019 to 2023 as the research subjects. To ensure the completeness and stability of the sample data, ST companies and those with missing data are excluded. Ultimately, 27 listed tourism companies with a total of 135 samples are selected. The data in this paper are all from the CSMAR database, and Stata 16.0 software is used for the research analysis.

Mathematical Formulas

$$ROA_{it} = \alpha 0 + \alpha 1 DAR_{it} + \alpha 2 GROWTH_{it} + \alpha 3 SIZE_{it} + \lambda_i + \mu_t + \varepsilon_{it} \quad (1)$$

$$AC_{it} = \beta 0 + \beta 1 DARit + \beta 2 GROWTH_{it} + \beta 3 SIZE_{it} + \lambda_i + \mu_t + \varepsilon_{it} \quad (2)$$

$$ROA_{it} = \gamma 0 + \gamma 1 AC_{it} + \gamma 2 GROWTH_{it} + \gamma 3 SIZE_{it} + \varepsilon_{it} \quad (3)$$

$$ROA_{it} = \sigma 0 + \sigma 1 DAR_{it} + \sigma 2 AC_{it} + \sigma 3 GROWTH_{it} + \sigma 4 SIZE_{it} + \lambda_i + \mu_t + \varepsilon_{it} \quad (4)$$

Research Questions

Does the capital structure of listed tourism companies have a significant negative effect on financial performance? Does the capital structure of listed tourism companies have a significant positive effect on agency costs? Do agency costs of listed tourism companies have a significant negative effect on financial performance? Are agency costs of listed tourism companies a mediating variable in the relationship between capital structure and financial performance?

Conclusion

The main conclusions are as follows. Firstly, the capital structure of listed tourism companies has a significant negative impact on financial performance; Secondly, the capital structure of listed tourism companies has a significant positive impact on agency costs; Thirdly, the agency costs of listed tourism companies have a significant negative impact on financial performance; Finally, the agency costs of listed tourism companies play a significant intermediary effect in the relationship between capital structure and financial performance, and it is a partial intermediary effect.

Tables

Table 1. Descriptive statistics

Variable	N	mean	sd	min	max
ROA	135	–0.025	0.097	–0.536	0.193
DAR	135	0.443	0.243	0.059	1.287
AC	135	0.224	0.146	0.014	0.856
GROWTH	135	0.030	0.283	–0.413	2.431
SIZE	135	21.861	1.038	18.280	24.650

Table 2. Correlation analysis

Variable	ROA	DAR	AC	GROWTH	SIZE
ROA	1				
DAR	–0.457***	1			
AC	–0.255***	0.110	1		
GROWTH	0.139	0.096	–0.071	1	
SIZE	0.232***	0.072	–0.060	–0.146*	1

Table 3. Empirical results

	(1) ROA	(2) AC	(3) ROA	(4) ROA	(5) ROE	(6) ROE	(7) ROE
DAR	–0.472***	0.206**		–0.191***	–1.959***		–1.894***
	(–6.64)	(2.31)		(–6.73)	(–6.71)		(–6.49)
AC			–0.153***	–0.113**		–0.223	–0.421*
			(–2.81)	(–2.39)		(–1.08)	(–1.73)
GROWTH	0.069**	0.069*	0.054*	0.074***	0.290**	0.044	0.296**
	(2.13)	(1.71)	(1.92)	(3.01)	(2.45)	(0.43)	(2.53)
SIZE	0.042	–0.112***	0.023***	0.027***	0.102	0.086***	0.068
	(1.27)	(–2.70)	(2.94)	(4.03)	(0.81)	(3.04)	(0.53)
_cons	–0.732	2.532***	–0.485***	–0.504***	–1.455	–1.906***	–0.641
	(–1.02)	(2.79)	(–2.86)	(–3.44)	(–0.53)	(–3.05)	(–0.23)
N	135	135	135	135	134	134	134
R^2	0.432	0.426	0.137	0.360	0.337	0.077	0.356
adj. R^2	0.246	0.238	0.117	0.340	0.153	0.056	0.168
F	10.958	10.704	6.919	18.256	17.646	3.611	14.236
p	0.000	0.000	0.000	0.000	0.000	0.015	0.000

* p < 0.1, ** p < 0.05, *** p < 0.01