

# Factors Affecting Financial Performance of Tourism Destination Firms Listed on Stock Exchanges in China

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**Abstract: Purpose:** the aim of this research is to test the effect of financial ratio on the financial performance of tourism destination firms listed on stock exchange in China. The research selected ratios: current ratio (CR) as a dimension of liquidity, total asset turnover ratio (TATR) as a dimension of asset utilization, debt ratio (DE) as a dimension of leverage, natural logarithm of total asset (LNTA) as a dimension of firm size, GDP growth rate as a dimension of economic prosperity, and effective tax rate as a dimension of effective tax. This research will use return on asset (ROA), return on sales (ROS), return on equity (ROE) and sales growth (SG) to determine the financial performance. Since stock exchange founded in China, tourism destination firm developed very fast. However tourism destination listed firms have weakness financial performance. **Design/methodology/approach:** the research data collected from quarterly financial report, from 2012 Q1 to 2018 Q4. The secondary data has been analyzed by multiple regression. **Finding:** the result indicate that CR, TATR, GDP growth rate have positive impact on financial performance. While DE has negative impact on financial performance. And LNTA has a mix result with financial performance. **Originality/value:** This study led to the effect of financial ratios on tourism's financial performance since past researches with this aim were difficult to identify and certain references were not specifically linked to the topic.

**Keywords:** Tourism destination firms, Financial performance, Finance, Liquidity, Asset utilization, Debt ratio, Leverage economic prosperity, Firm size, Effective tax

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## 1 Introduction

Financial performance assessments are based on financial indicators reflected in the company's financial statements. This evaluates and analyzes the financial situation and the company's results in order to reflect the company's strengths and weaknesses, financial status and development trends, enhance the company's financial results and provide critical financial information to maximize decisions.

Tourism destination firm is an institution that operating and promotion the tourism destination. In China there are 15 tourism destination firms listed on stock exchange in China. Tourist destinations are an important part of tourism and the core of attracting tourists. As China's tourism industry is developing rapidly, tourist destinations have received more and more attention and favor. However there also have a lot of problems in tourism destination listed firm in China. Financial performance of tourist destination listed firms is not strong<sup>[1]</sup>. Profitability, leverage, liquidity, and development capability, and all have their own weaknesses<sup>[2]</sup>.

The research objective is to find the relationship between financial ratio and financial performance of tourism destination firms listed on stock exchanges in China. It has some significance value for the investor and stakeholder. The results can help the manager to control costs to obtain good economic benefits, to enhance market share and market competitiveness and provide important decision-making reference.

## 2 Literature review

Many papers use financial ratios to assess a company's financial performance.

Wu and Lu (2001) researched how models should be developed to examine financial efficiency in the listed firms of China. Initially, they decided 21 economic ratios to choose six key financial ratios: Earnings Growth Index, Return on Assets, Current Ratio, Long-term Liabilities / Equity Rate, Working Capital / Total Accounts Ratio and Asset Turnover<sup>[3]</sup>.

Zhang et al.(2006) chosen 15 financial measures to examine the financial performance factor: net assets per share, dividend-per-share ratios, ROA, deducted income, present ratio, fast ratio, debt ratio, debt ratio, long term indebtedness, loan assessment ratios, payment ratios, stock sales, ROS, profit margin, return on asset and ROE<sup>[4]</sup>.

Ruf et al.(2001) selected return on equity (ROE), return on sales (ROS), and sales development as main variables in the measurement of strong economic human welfare in studies of determinants of economic efficiency by analysis structure method. The panel information for the 422 companies from 1996 to 2000 were used for regressions. In order to examine the connection between corporate personal accountability and economic results, the economic achievement has been calculated by ROA, ROE and ROS<sup>[5]</sup>.

The empirical analysis by Schmalensee R. (1985) showed the reasons for different companies' performance in the same industry. Return in asset (ROA) were measured as a proportion of corporate performance to research factors that influence corporate performance (profitability of the company)<sup>[6]</sup>.

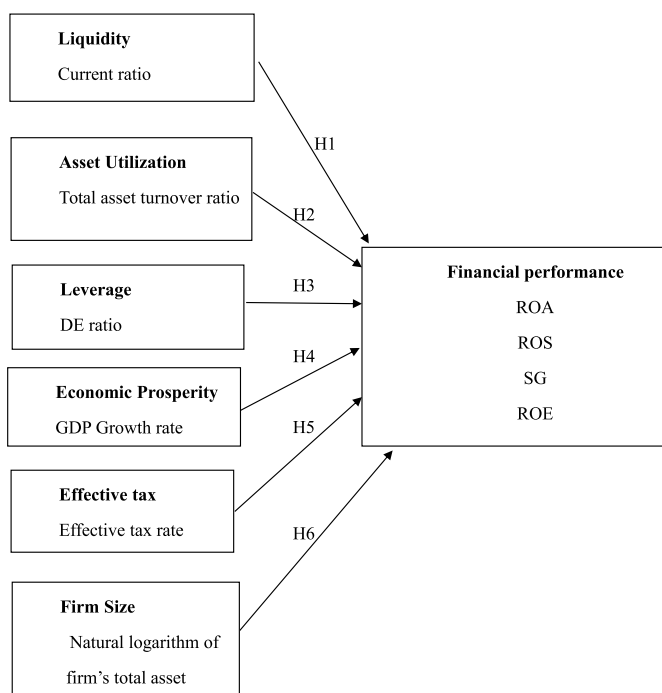
Stigney (1990) said that the returns on assets (ROA), divided by net material assets in financial performance analysis, were determined by earnings before interest, tax and non-extraordinary items<sup>[7]</sup>.

In the Wei(2012) study, current ratio, DE ratio, total asset turnover, GDP growth rate, agriculture product price index was used as the independent variable and ROA ROS SG was used to evaluate the dependent variable financial performance. In the study of, Equity over total asset, cost income ratio, size, GDP growth rate, and effective tax rate were used as independent variables and ROA and ROE were used to evaluate the dependent variable<sup>[8]</sup>.

From the calculation formula analysis, the total asset turnover is better than the cost income ratio, and the reaction manager uses the total assets of the company.

DE ratio and equity over total asset are used to reflect the capital structure of the company, while DE ratio can more directly reflect the relationship between debt and Equity than equity over total asset. Agriculture product price index does not apply to tourist destinations firms<sup>[9]</sup>.

According to the literature review, liquidity, asset utilization, leverage, economic prosperity and effective tax rate have relationship with the firm financial performance. In this study, we applied the conceptual framework of Wei(2012) and came up with the following conceptual framework in combination with the background and problems of this study<sup>[8]</sup>.



### Hypothesis

Hypothesis1: Liquidity has positive effect on financial performance of tourist destination firms listed on share Stock Exchanges in China.

Liquidity has a positive effect on financial performance, according to Adams and Buckle (2003)<sup>[10]</sup>. This research therefore expects the impact of liquidity on economic results to be positive.

Hypothesis2: Asset utilization has positive effect on financial performance of tourist destination firms listed on share Stock Exchanges in China.

According to Jose et al., Asset utilization affects economic performance in a beneficial way<sup>[11]</sup>. This research, therefore, expects Asset utilization to have a positive impact on financial performance.

Hypothesis3: Leverage has negative effect on financial performance of tourist destination firms listed

on share Stock Exchanges in China.

According to Tian and Zeitun, Leverage's financial performance impacts adversely<sup>[12]</sup>. This study, therefore, expects Leverage to negatively affect financial performance.

Hypothesis4: Economic prosperity has positive effect on financial performance of tourist destination firms listed on share Stock Exchanges in China.

Economic prosperity is having a positive effect on financial performance, according to Wei(2012)<sup>[8]</sup>. This study is, therefore, anticipating that the impact on the financial performance of economic prosperity is positive.

Hypothesis5: effective tax has negative effect on financial performance of tourist destination firms listed on share Stock Exchanges in China.

Finds that effective tax has an adverse impact on financial performance. This study, therefore, expects the efficient tax to impact financial performance positively.

Hypothesis6: firm size has positive effect on financial performance of tourist destination firms listed on share Stock Exchanges in China.

Shows a beneficial impact on economic results on firm size. This study, therefore, expect that firm size will have a beneficial impact on financial performance.

### 3 Research method

The population of this research is 15 firms listed on stock exchange in China. In the choice of research objects, this research adheres to the following principles: (1) the firm listed before 2012 are taken as research objects, mainly to prevent the beautification of financial statements in the initial public offering, which would affect the reliability of the whole results. (2) In order to prevent the abnormal data of individual companies from interfering with the overall results, companies that have experienced ST since 2012. This study selected 10 tourist destination listed firm quarterly financial data and the sample size is 280.

There are three steps to analyze the data, the unit root test, multicollinearity test, and multiple regression. The first step is the unit root to determine the variables which influence the economic performance of Chinese tourist destination companies. The second step is multicollinearity test. In order to check is there problem

of multi-coordination if the relationship between two explicative variables is less than 0.80. Finally is multiple regression. The study uses regression analysis to explore each factor influencing the financial performance of tourist destination firms listed on share stock exchanges in China. The study adopts data from 10 tourist destination listed firms, which include liquidity, asset utilization, leverage, firm size, economic prosperity and effective tax.

The multiple regression formula of Y on  $X_1, X_2, \dots, X_n$  is like this:

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n + e_t$$

As for this study, it takes return on assets (ROA) as the dependent variable for the main findings. In order to create the model to find what factors effect ROA, the model of ROA is designed as the following:

$$ROA_{it} = a + b_1CR_{it} + b_2TA_{it} + b_3DE_{it} + b_4GDP_t + b_5ET_{it} + b_6SIZE_{it} + e_{it} = \frac{\text{Net Income}}{\text{Total asset}}$$

In order to create the model to find what factors effect ROS, the model of ROS is designed as the following:

$$ROS_{it} = a + b_1CR_{it} + b_2TA_{it} + b_3DE_{it} + b_4GDP_t + b_5ET_{it} + b_6SIZE_{it} + e_{it} = \frac{\text{Net Income}}{\text{Net Sales}}$$

In order to create the model to find what factors effect ROE, the model of ROE is designed as the following:

$$ROE_{it} = a + b_1CR_{it} + b_2TA_{it} + b_3DE_{it} + b_4GDP_t + b_5ET_{it} + b_6SIZE_{it} + e_{it} = \frac{\text{Net Income}}{\text{Total Equity}}$$

In order to create the model to find what factors effect SG, the model of SG is designed as the following:

In the equations above, "it" indicates the firm, "t" indicates time period, and the other variables are defined as the following:

$$CR_{it} = \text{Current ratio of firm i at time t} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

$$TA_{it} = \text{Total Asset turnover of firm i at time t} = \frac{\text{Sales}}{\text{Total Asset}}$$

$$DE_{it} = \text{Debt ratio of firm i at time t} = \frac{\text{Liabilities}}{\text{equity}}$$

$$GDP_t = \text{GDP growth rate at time t}$$

$$ET_{it} = \text{Effective Tax rate of firm i at time t} = \frac{\text{Total Tax Paid}}{\text{Pre | Tax Earning}}$$

$$SIZE_{it} = \ln(TA) \text{ of firm i at time t} \ln(TA)$$

$$a = \text{constant}$$

$$b_1, b_2, b_3, b_4, b_5, b_6 = \text{Coefficient}$$

$$e_{it} = \text{error term}$$

## 4 Research result and discussion

### 4.1 The unit root test

**Table 1.** The results of Stationary Test by Unit -Root test

Variables	Levin, Lin & Chu t*	Prob.	Result
ROA	-14.0646	0.0000	Stationary
ROS	-12.1027	0.0000	Stationary
ROE	-16.7428	0.0000	Stationary
SG	-14.1559	0.0000	Stationary
CR	-2.0228	0.0215	Stationary
TATR	0.4612	0.6777	Non- Stationary
DE	0.5570	0.7113	Non- Stationary
ET	-9.3070	0.0000	Stationary
LNTA	2.7162	0.9967	Non- Stationary
GDP	-6.4999	0.0000	Stationary
D(TATR)	-20.3592	0.0000	Stationary
D(DE)	-11.6763	0.0000	Stationary
D(LNTA)	-12.7729	0.0000	Stationary

Levin, Lin & Chu t\* is a method to test panel unit-root. If it result is higher than 0, the data is Non-Stationary. If it result is lower than 0, the data is Stationary.

Table 1 shows the Unit Root Test results of the variable ROA, ROS, ROE, SG, CR, ET and GDP probability value that is less than 0.05 and Levin, Lin & Chu t\* are lower than 0, meaning that the ROA, ROS, ROE,SG, CR, ET and GDP variable value are stationary. But a TATR, DE and LNTA variable is

**Table 3.** Multiple regression result

		ROA	ROS	ROE	SG
Current Ratio	Coefficient	0.0024	0.0627	0.0016	0.0124
	Prob	0.0000***	0.0222**	0.0820*	0.829
Total Asset Turnover Ratio	Coefficient	0.2218	1.1545	0.3852	12.6699
	Prob	0.0000***	0.1961	0.000***	0.000***
Debt Ratio	Coefficient	-0.0159	-0.186	-0.0344	0.367
	Prob	0.0001***	0.3371	0.000***	0.3692
Effective Tax rate	Coefficient	0.0017	0.0136	0.0041	0.0236
	Prob	0.1896	0.8305	0.0682*	0.8601
Natural logarithm of firm's total asset	Coefficient	0.0183	0.2615	0.0341	-1.3113
	Prob	0.0001***	0.2448	0.000***	0.0060***
GDP growth rate	Coefficient	1.41	30.527	1.9592	36.3867
	Prob	0.0206**	0.3019	0.0618*	0.5595

According to Table 3, when ROA determine the financial performance, current ratio (CR), total asset turnover ratio (TATR), debt ratio (DE), GDP growth rate and natural logarithm of firm's total asset (LNTA) has significant effect financial performance. When ROS determine the financial performance, total asset

more than 0.05 and Levin, Lin & Chu t\* are higher than 0, it is a non-stationary variable value of TATR, DE and LNTA. In order to make them stationary, the first difference must also be for TATR, DE and LNTA. The probability value is less than 0.05 and Levin, Lin & Chu t\* are lower than 0 following the first differentiation of TATR, DE and LNTA. The D(TATR), D(DE) and D(LNTA) variables are therefore stationary.

### 4.2 Multicollinearity test

The results from Multicollinearity Test show in Table 2

**Table 2.** The correlation of the independent variables

Correlation	CR	D(TATR)	D(DE)	ET	D(LNTA)	GDP
CR	1.0000					
D(TATR)	-0.0519	1.0000				
D(DE)	-0.0950	-0.0555	1.0000			
ET	0.0485	0.0117	0.0319	1.0000		
D(LNTA)	0.0286	0.0518	0.1829	0.0484	1.0000	
GDP	-0.0688	0.1677	0.0465	0.0817	-0.1044	1.0000

The assessment of the correlations of autonomous variables in the system is shown from Table 2. The correlation coefficient value is discovered not to be above the multicollinearity value, which is less than 0.8. There is therefore no issue with multi-linearity. The regression may be performed through all five independent variables.

### 4.3 Multiple regression

turnover ratio (TATR), has significant effect financial performance. When ROE determine the financial performance, total asset turnover ratio (TATR), debt ratio (DE), and natural logarithm of firm's total asset (LNTA) has significant effect financial performance. When SG determine the financial performance, total

asset turnover ratio (TATR), debt ratio (DE), natural logarithm of firm's total asset (LNTA) has significant effect financial performance.

The research shows that the liquidity hypothesis is acceptable and demonstrates that liquidity has a positive impact on the financial performance of Tourism Destination Firms on Chinese Stock markets. The positive correlation between liquidity and financial performance indicates that the current ratio is greater.

The outcome of the research indicates that the hypothesis of the asset utilization is accepted, therefore the results show that asset utilization has a positive effect on the return on asset (ROA). The positive relationship between asset utilization and financial performance demonstrates a greater total asset turnover ratio, more productive use of firm resources and better financial performance.

The results discovered a greater debt ratio, and a worse performance. The firm has a large debt, which also means that the interest costs that the company has to pay are high. The elevated interest expenditure results in low net revenues. The financial performance of the firm is therefore negatively affected by the high debt.

The result indicates that economic prosperity is accepted, with a positive impact on the financial results of tourism destination firms on bonds in China. The results show that economic prosperity is accepted. The positive correlation between economic prosperity and financial performance shows that the GDP growth rate is higher, firm's financial performance is better.

Based on the results, Firm size ROA and ROE would have a positive impact, while the negative impact on the related SG, therefore the conclusion and the hypothesis are not consist. However the conclusion of research is firm size has positive effect on ROA and ROE. Roman, F. and Veronika, H. (2015) concluded, the firm size has negative effect on sales growth(SG) in case of the Czech Republic<sup>[13]</sup>. The result is consist with literature reviews.

The result demonstrates that the hypothesis that an effective tax rate is rejected so that efficient tax will have no impact whatsoever on the financial performance of tourism destination firms on the Chinese stocks. Since 2010, China's corporate income tax has remained at 25%, and commodity value-added tax has been maintained at 17%, (data from: [tradingeconomics.com/china/sales-tax-rate](http://tradingeconomics.com/china/sales-tax-rate)) which has led to the fact that the effective tax in this research has no significant impact

on financial performance.

## 5 Conclusion and recommendation

The results are significant in terms of the financial performance of the tourism destination companies listed on the stock exchanges in China in terms of liquidity, asset utilization, leverage and economic prosperity. Five recommendations are therefore presented as follows.

Frist, Tourism Destination listed firms need to control the ratio between current asset and current liability to avoid excessive short-term debt risk.

Second, the aim of the asset utilization ratios is to describe how efficiently or intensively a company uses its assets to achieve revenues. According to Wei(2012) recommendation, the business companies listed in the Tourism Destination should prepare a specific management plan based on the characteristics of the businesses listed in the Tourism Destination management system<sup>[8]</sup>. Build the brand image and build a good company culture by developing and combining advanced management experience and corporate features.

Third, the companies listed on the Tourism Destination should take full advantage of the financial leverages, avoiding high financial risk and improving financial performance in the tourist destination companies listed on the stock exchanges in China by reasonable control of their long-term debt.

Fourth, In order to resolve the issue of the inefficient use of long-term debt finance and smooth debt limitations, the companies mentioned should enhance the bankruptcy system. The positive correlation between leverage and economic results is a good precondition of a solid bankruptcy scheme. Developing the scheme of safety for payment of loans and enhancing banking supervision for listed companies from Tourism Destination to leverage has a beneficial influence on listed companies from Tourism Destination.

Fifth, According to the data analysis result, Economic Prosperity has positive effect on financial performance. Tourism Destination listed firms should pay attention to the impact of the country's Economic Prosperity on firms, and should expand its business and attract investment in a good macroeconomic situation. In the case of a poor macroeconomic situation, manager should reduce business and invest in projects or financial products that can be used in hedging economic situation.

Also there are some limitations in this research.

First, Tourism Destination's sample size is very limited for listed companies. There are only 15 listed tourist attractions, but there are still many travel companies that are not listed, limiting the sample size.

Second, Financial performance has many factors and each aspect cannot be analyzed. In this study liquidity, asset utilization, leverages, economic prosperity, firm size and effective tax were explored, although other aspects were not analyzed.

In addition, the idea of analyzing this study is very clear and the method of analysis is practicable. This study can also contribute to further studies. Further research can take into account the problems proposed by this research in other types of companies or in other aspects when analyzing the economic efficiency of the listed companies. This study would add to the growing knowledge of listed companies' financial performance.

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