

Analysis of the Influential Factors on the Profitability of Online Travel Agency Based on Platform Grows: Evidence from Ctrip

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Abstract

Review Article

Corporate profitability is closely geared to its operating activities, but existing research usually start from a financial perspective or single factor. Based on the main operating activities of online travel agency, this paper explores the relationship between influential factors and profitability by taking Ctrip as an example. We rank the influential factors as fellow though the unitary regression and find that sales expense to operating revenue ratio, management expenses to operating income ratio are the largest, followed by the M&A integration performance, then the accounts receivable turnover, total asset turnover and current asset turnover are the smallest. Assets liabilities ratio, current liabilities to total liabilities ratio and operating income ratio also impacts on the profitability while other factors remain unchanged. Ctrip incurred declining profitability from 2012 to 2016 because of poor marketing ability, decline integration ability, irrational capital structure and cash flow management. Finally, we propose some suggestions in the management according to the analysis.

Keywords: Online Travel Agency; platform; profitability; influencing factor.

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INTRODUCTION

With the development of China's tourism industry, Online Travel Agency (OTA) has seen an increase in market transactions and online penetration rates. In 2017, the transaction volume of China's online travel market reached 892.33 billion yuan, a nominal increase of 20.7%. In the fierce competition of OTA, Ctrip, Qunar, and Fliggy stood out and had an absolute advantage in the market, accounting for 70.4% of the total trading share. Although OTA is growing at a high speed, many companies are still at a loss. According to the 2015 financial report released by OTA, the total net profit loss of the three companies, namely, Elong, Qunar and Tuniu, were nearly 10 billion yuan; Ctrip's 2016 annual report showed that its annual operating loss was 1.6 billion yuan and its operating loss rate was 8%. It can be seen that the rapid development of OTA has not brought profits to enterprises, but had fallen into a situation of accompanied by the growth of revenue and business, and the simultaneous expansion of losses. Although Ctrip achieved a net profit of 2.1 billion yuan in 2017, it turned losses into profits.

However, for most OTAs, how to maintain good growth in the highly concentrated online travel

market and enhance their profitability is still an important issue that cannot be ignored.

The profitability of an enterprise refers to the ability of an enterprise to make profits by using various economic resources. It is a comprehensive manifestation of acquiring cash ability, reducing cost capability, enterprise marketing capability and risk avoidance ability, and is also a concrete manifestation of the business results of various links of the enterprise [1]. It is the inevitable result of enterprise development. Since profitability is an important factor in determining corporate value [2], the analysis of corporate profitability is becoming more and more important. The factors affecting the profitability of enterprises are divided into two categories: internal factors and external factors. Internal factors have a direct impact on the profitability of the company. The impact of external factors on corporate profits is achieved through internal factors. OTA is a company that provides consumers with travel products such as air tickets, hotels, and holiday products on the Internet [2]. At present, OTAs that are leading in the market, such as Ctrip, Qunar and Tuniu, are mostly platform-based enterprises. In the formation process of platform-based enterprises, OTA has acquired operational capability, marketing capability, resource integration capability and enterprise

growth capability from the continuous innovation of platform business model, the implementation of marketing strategy, the construction of platform ecosystem and continuous financing. The result is a comprehensive manifestation of the various capabilities associated with profitable activities, namely profitability. Therefore, various business activities based on the development of the platform are the direct influencing factors of OTA's profitability.

Therefore, this paper will discuss the following three issues in depth. First, what are the factors that affect the profitability of OTA in the development of the platform? Second, does OTA's main business activities, such as the innovation of the platform business model, the implementation of marketing strategies, the construction of the tourism ecosystem, and ongoing financing bring profitability? Third, through the analysis of the factors affecting profitability, we find out the reasons for the decline in OTA's profitability. The main contributions of this paper are as follows: First, the perspective of analysing the factors affecting the profitability of OTA is proposed, that is, the business activities based on the development of platform enterprises; Second, through factor analysis, a comprehensive indicator is used instead of profitability, and then each influencing factor is subjected to regression analysis to explore the relationship between OTA profitability and its influencing factors; Thirdly, according to the analysis of the factors affecting the profitability of OTA, the problems that should be paid attention to in OTA management are put forward.

LITERATURE REVIEW

Research on Online Travel Agencies

OTA, is known as online travel service provider, or online travel agency [3]. From the content of the services provided, the travel agency is an integrated service provider or a full-service provider that provides the needs of tourists to eat, live, travel, entertainment, and purchase during the travel process. The Online Travel Agency, as its name implies, is an all-round travel service provider or enterprise that uses the Internet and information and communication technologies to provide the public with a variety of needs for travel. Scholars have classified OTA from different perspectives. According to the function and business model, it is divided into four categories: online travel agency, vertical search, group buying, and user content generation [4]. According to the platform service content, it is divided into comprehensive tourism products, vertical search for tourism products and group purchase for tourism products [5]. This paper believes that according to the formation of all-round travel service providers, OTA can be divided into two categories: one is to provide for meeting the needs of a certain aspect of tourists, such as Ctrip's early provision of air tickets, booking rooms and other services. Second, e-commerce companies are involved in tourism

services, and online travel services are one of the components of their ecosystem. Fliggy is the result of the extension of Alibaba's e-commerce business to travel services. This paper will study the former type of OTA.

Scholars have also studied the following two aspects of OTA. Some studies focus on the impact of network and information technology on tourism, the role of network information and information technology in reducing online transaction costs and promoting information flow. Other studies focus on the customer online travel consumption behavior, involving tourist perception characteristics, information Search behavior, travel planning decisions and satisfaction assessments. Domestic research in this field mainly focuses on tourism e-commerce, travel websites, mobile e-commerce booking, online travel industry value chain and so on [6]. There are not many studies on the profitability of OTAs and their influencing factors.

Research on factors affecting corporate profitability and its measurement indicators

The factors affecting corporate profitability can be divided into two categories: internal factors and external factors. Internal factors are determined by corporate management decisions and business characteristics, including corporate governance structure, operational efficiency, risk management level, etc. External factors come from the macro environment in which enterprises are located, including political, economic, technological, and social environments. These factors are not controlled by the company [7]. Almazari [8] divided internal factors into financial and non-financial factors. In recent years, scholars have analyzed financial factors as follows: cash flow factors [9], capital structure [10], income structure [11], company risk [12], marketing ability [13], shareholding structure [14], etc. The analysis of non-financial factors includes: operational efficiency [15], growth [16], goodwill, public welfare marketing, corporate innovation, financing methods [17]. Regarding the study of external factors, domestic scholars have proposed that the economic cycle strategy, industry heterogeneity and so on have an impact on corporate profitability; while foreign scholars propose inflation, economic growth rate, money supply and legal system have an impact on corporate profitability.

The profitability of a company is the result of a combination of factors.

Traditionally, profitability has been studied as a financial issue. It refers to the ability of an enterprise to make a profit within a certain period of time. The higher profit rate means the stronger profitability. Therefore, when evaluating profitability, most scholars have selected financial indicators. For example, Aydemir [18] selected the indicators of total return on assets, return on equity, and earnings per share to study the profitability of listed companies. According to the

other scholars used to measure the financial indicators of listed companies' profitability [19-21], this paper uses the indicators of earnings per share, total return on assets, return on net assets and operating profit margin to study the profitability of enterprises. However, most of the research on the factors affecting profitability is carried out from the financial point of view or from a single influencing factor. This makes the analysis of corporate profitability incomplete and unsystematic.

The daily activities of the enterprise or the various capabilities accumulated in the business unit form profitability. In order to adapt to changes in the external environment, companies have demonstrated different forms of capabilities in order to adjust their business activities in a timely manner. Therefore, the impact of external factors on corporate earnings is achieved through internal factors. Thus, internal factors have a direct impact on the profitability of the company. OTA is an enterprise that uses the Internet as a platform to operate, connect different market groups, and profit from meeting the different value propositions of market groups. By connecting two or more specific groups, a series of mechanisms are developed to continuously stimulate the network effect, and subtly profit from it under the premise of satisfying the needs of each group [22]. In the development process of the platform, OTA takes the main business activities such as continuous innovation of the platform business model, implementation of the marketing strategy, construction of the platform ecosystem and continuous financing, to obtain operational capability, marketing capability, M&A integration capability and growth capability. Therefore, it also has an impact on the comprehensive performance of various capabilities, namely profitability.

This paper will systematically analyze the internal influence factors of OTA's profitability, that is, to study the profitability of OTA from the perspective of business activities in the development of the platform.

Analysis of Influencing Factors of OTA Profitability Based on Platform Development

In the process of platform development, OTA first develops targeted marketing strategies based on the platform business model, attracting consumers and tourism suppliers to enter the platform; and then integrating resources to form an enterprise ecosystem in order to expanding platform scale, promoting self-transformation and re- innovation of the platform business model to form a virtuous circle. In this process, it is necessary to continue financing, rationally arrange the capital structure, and ensure the smooth progress of the recycling process. Therefore, OTA has formed various capabilities in the development of the platform, and the main business activities in the development of the platform have become the main factors affecting the profitability of OTA.

The innovation of the platform business model strengthens the operational capability of enterprises

OTA built a platform business model with the help of the Internet, and the platform business model is the key to the great success of OTA such as Ctrip, Tuniu and Qunr. They use the Internet as a platform to connect different market groups such as tourism consumers and tourism suppliers. By formulating platform operation rules and service content, the value proposition of tourism consumers and the tourism suppliers is matched, which realizing the value creation and transmission. In the process of value creation and transmission, not only the income model and cost model of OTA are formed, but also the value of platform, tourism suppliers and tourism consumer group can be realized. Such as Ctrip's commission mode. Therefore, the innovation of the platform business model has improved the turnover rate of the receivables of the tourism enterprises and the turnover rate of the current assets, strengthened the overall operational capacity of the enterprise and formed considerable profitability (As shown in Figure-1).

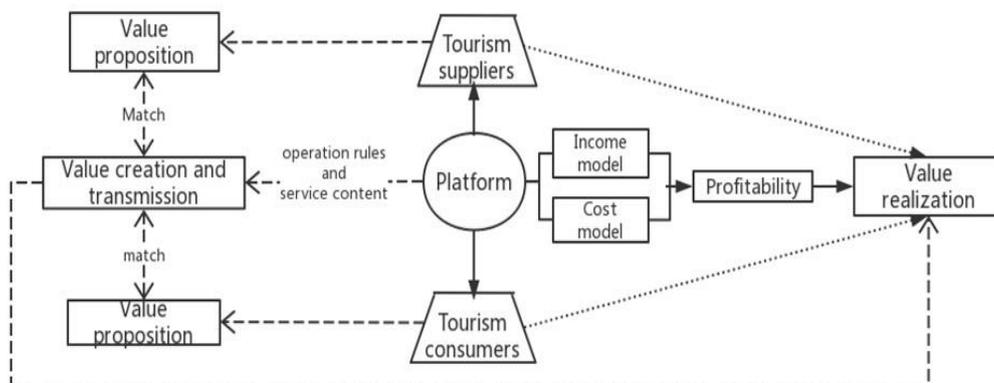


Fig-1: The platform business model of OTA

The implementation of marketing strategy forms the marketing ability of enterprises

OTA need to attract tourism consumers and suppliers to join the platform and survive and sustain sustainable development in the ever-changing market competition.

Marketing is of paramount importance [23]. At the beginning of the platform establishment, in order to achieve rapid growth in the number of users and operating income in the short term, most OTAs adopted a marketing strategy of low-cost subsidies. Just like Tongcheng who adopting "one dollar ticket" and Tuniu who adopting "one yuan outbound tour" and other marketing strategies, they seized the market with losing profits. With the development of enterprises, each OTA no longer uses price competition as the main marketing means, but through self-media marketing and "online + offline" brand alliance, which focusing on tourism brands. They achieve the profit goal by improving the quality of the platform and bringing a better corporate image. For example, Tuniu and Yunnan Satellite TV jointly created the 90-year global travel reality show "Getting Started Us". Only by implementing an effective marketing strategy and forming a good marketing capability can OTA establish its own industry status and competitive barriers, thus laying the foundation for higher profits.

Enhance M&A integration capabilities by building a tourism ecosystem

Building a multi-win platform ecosystem is the core of the platform strategy. The so-called Internet enterprise platform ecosystem is a system formed by the organic synergy of the platform ecosystem by constructing a multi-variable group cooperation and win-win mechanism, which enables the platform ecosystem to be driven by the core business [24]. OTA's tourism ecosystem is composed of core businesses – tourism services, and derivative coverage businesses such as aviation, finance, and medical. In recent years, OTAs have intensively developed upstream and downstream industrial chains through mergers and acquisitions (M&A) to forming new cross-border and integration, accelerating the construction and layout of their tourism ecosystem. For example, Ctrip has continuously evolved into a business segment including accommodation, ticketing, car, shopping, tourism, business travel management and tourism information through acquisition of Qunr, shares in China Eastern Airlines and alliance with Shanghai Bank. In the process of building the tourism ecosystem, OTA's ability to integrate mergers and acquisitions is constantly improving through the integration of different resources.

Continuous financing increases the growth capacity of enterprises

OTA requires a lot of capital support in the creation of the platform business model and the

construction of the tourism ecosystem. However, due to the fact that the funds of OTA's own business activities cannot meet the needs of further development of the company, it is necessary to carry out financing activities. In the different stages of development of OTA, the access to financing is different because of the different development goals. In the burgeoning period, in order to survive, the enterprise is mainly focused on acquiring angel investment; In the growth period, financing is mainly for obtaining venture capital because the enterprise has certain value, In the development period, it is financing by issuing stocks to enhance the firm value and accelerate the pace of globalization. OTA's continuous financing has improved the company's growth ability and laid a good foundation for the sustainable development of the platform.

All in all, the innovation of the platform business model has improved the accounts receivable turnover and total asset turnover of tourism enterprises strengthened the overall operational capability of enterprises. The implementation of effective marketing strategies has formed marketing capabilities. In the process of the tourism ecosystem, the integration capability of M&A has been improved. Through financing, the growth capacity of enterprises has been improved. In addition, the business activities of OTA and the formation of various capabilities are inevitably affected by capital structure, cash flow management and equity structure. The capital structure affects the risk of corporate capital turnover, which affects the stability of platform operations and returns, and has an impact on profitability. Cash flow management is a dynamic process for enterprises to adjust the capital chain. The abundant cash flow can provide a solid guarantee for enterprises to resist external risks, promote the effective development of business activities, and improve the profitability of enterprises. At the same time, in the development process of the enterprise, the ownership structure of the company has also changed. The structure of shareholders, the concentration of ownership and the identity of major shareholders have led to a great difference between the behavior of shareholders and the management methods and effects of managers, which directly affects the efficiency of corporate governance and thus affects the profitability of enterprises. Therefore, in the development of the platform, with the formation of various capabilities, the profitability of OTA is finally formed (As shown in Figure-2).

Therefore, factors affecting OTA's profitability include: operational capability, marketing capability, merger and acquisition integration capability, corporate growth capability, capital structure, cash flow management, and equity structure.

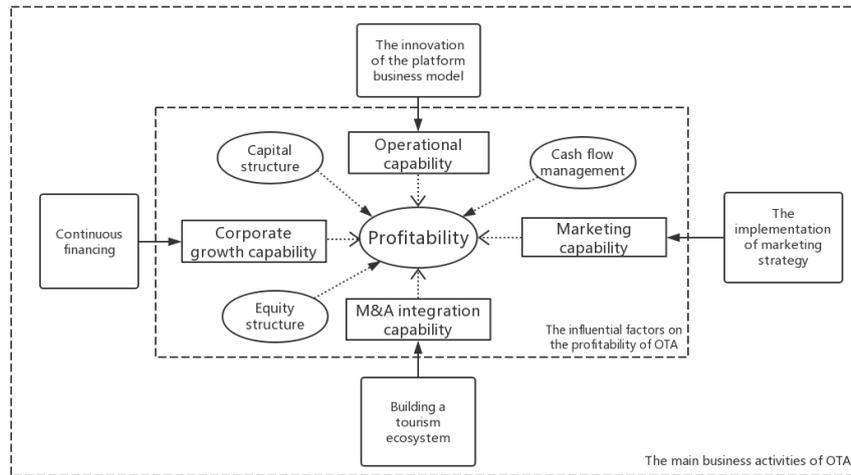


Fig-2: The formation of OTA's profitability

An Empirical Analysis of the Factors Affecting the Profitability of OTA: Taking Ctrip as an Example

Data and Variable Selection

Data Selection

This article chooses Ctrip as an example for two reasons. First, Ctrip (Ctrip International Limited) is a representative OTA. As of 2017, its total turnover reached 600 billion yuan, making it the second largest travel group in the world. Second, China's OTA market has a concentration of 35.7%, and its market share ranks among the leading online travel companies in China. Second, it is limited by the number of samples. At present, China's OTA listed on NASDAQ are: Ctrip (listed in 2003, stock code: CTRP), Tuniu (2014 listed, stock code: YOUR), OTA listed on the Chinese stock market has EBooking (2018 listed, stock code: 00780). In a small number of listed OTAs, Ctrip's data is relatively complete. The data in this study is from the 2003-2017 annual report disclosed by Ctrip.com.

Variable Selection

Dependent Variable. This paper uses the indicators of earnings per share (Y1), return on total assets (Y2), return on equity (Y3) and operating profit margin (Y4) to measure profitability, and uses factor analysis to derive the comprehensiveness of profitability score, which is total profitability. The total profitability is used as a dependent variable for subsequent analysis.

Factor analysis refers to the use of a few factors to describe the relationship between many indicators or factors, with a small number of factors reflecting most of the information of the original variables, reducing the overlap and waste of

information between the selected indicators. KMO and Bartlett's spheroidal test proved that there may be common factors between variables to start factor analysis. The relationship between the common factor extracted by the factor analysis and the original scalar can be written in a matrix form: $Y = AF_i + \epsilon$ ($i = 1, 2, 3, \dots$). Where Y is the original variable, matrix A is the factor load matrix, F_i is the common factor, and ϵ is the special factor of Y, indicating the part of a variable that cannot be expressed by the common factor. When the cumulative variance contribution rate is greater than 80%, it indicates that the common factor contains most of the information of the original variable, and the common factor can represent the original variable.

The steps of factor analysis are as follows: First, KMO measure and Bartlett's spheroid test were performed to obtain $KMO=0.584$ and proved to be suitable for factor analysis by Bartlett's spheroid test ($sig<0.05$). Second, the R software is used to determine the variance contribution rate of the common factor and each factor. The two common factors are extracted with the criterion root greater than 1, and the cumulative variance contribution rate reaches 97.25%(As shown in table 1), which contains most of the information of Y1~Y4. Third, calculate the comprehensive profitability by using the common factor (hereinafter referred to as profitability, expressed by PRO). The F1 and F2 scores from 2003 to 2017 are calculated by regression estimation method, and the variance contribution rate of each factor is used as the weight, and the formula is substituted into:

$$PRO=(0.7184F_1+0.2541F_2)/0.9725$$

Table-1: The characteristic root and variance contribution rate of common factors

Common factors	Vars	Vars.Prop (%)	Vars.Cum (%)
F1	2.87	71.84	71.84
F2	1.02	25.41	97.25

The 2003-2017 profitability PRO (see Figure-3) shows that the development of Ctrip's PRO has the following characteristics. Ctrip's profitability development is divided into two phases. In the first stage (2003~2011), the profitability (PRO) of this stage was greater than zero, and the change of PRO was relatively stable. In the second stage (2012~2017), the

profitability (PRO) of this stage was less than zero, and the PRO had a large change. The Pro dropped from -0.31 in 2012 to -1.94 in 2016; in 2017, it rose back to -0.56, achieving a net profit of 2.1 billion yuan. The highest value of PRO was in the first stage, that is, in 2005, PRO was 0.90; the lowest value of PRO was in the second stage, that is, 2016, PRO was -1.94.

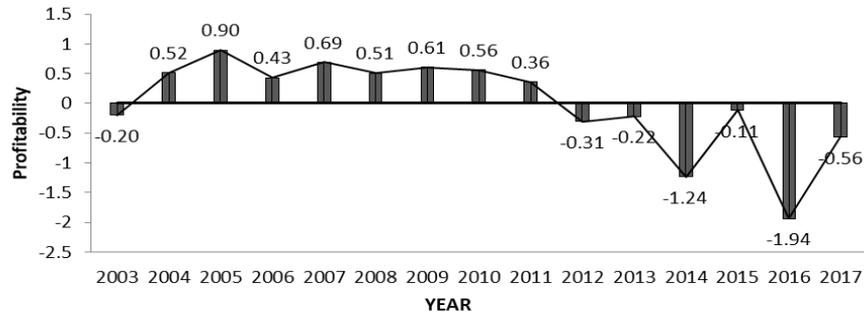


Fig-3: The profitability of Ctrip

Independent variables. The influencing factors that measure the different capabilities in the development of the platform are selected as the independent variables. There are 16 independent variables in 7 aspects. The specific indicators are as follows (As shown in Table-2).

- Operational capabilities. It generally measured by accounts receivable turnover (ART), total asset turnover (TAT) and current asset turnover (CAT) [25]; the higher the ART, TAT and CAT, the stronger the operational capability.
- Marketing ability. It generally measured by sales expenses as a percentage of operating income (SOI), management expenses as a percentage of operating income (MOI) and net profit margin (NPM) [26]; the higher the SOI, MOA, the weaker marketing capabilities.
- M&A integration capabilities. The impact of M&A integration activities on online travel companies is long-term and continuous. Therefore, the M&A

integration performance is measured by the average of three years after M&A (ATMA) [27]. The higher the ICMA, the stronger the M&A integration ability.

- Growth ability. It generally measured by total annual growth rate of total assets (AGTA), the annual growth rate of total operating income (AGTOI) and the value-added rate of assets (VRA) [28].

At the same time, the asset-liability ratio (ALR), current liabilities to total debt ratio (CLTD) and current ratio (CR) are used to measure the capital structure of the enterprise [29]. Net cash flow from operating activities is measured by the operating income ratio (OIR) [30]. The shareholding structure use the ratio of the largest shareholder holding (RLSH) and the ratio of the largest shareholder to the second largest shareholder (RLSSLS) [31].

Table-2: The independent variables of OTA's profitability

Independent Variables	Variable Symbol	Description
Operational capabilities	ART	Accounts receivable turnover
	TAT	Total asset turnover
	CAT	Current asset turnover
Marketing ability	SOI	Sales expenses as a percentage of operating income
	MOI	Management expenses as a percentage of operating income
	NPM	Net profit margin
M&A integration capabilities	ATMA	Average of three years after M&A
Growth ability	AGTA	Total annual growth rate of total assets
	AGTOI	Annual growth rate of total operating income
	VRA	Value-added rate of assets
Capital structure	ALR	Asset-liability ratio
	CLTD	Current liabilities to total debt ratio
	CR	Current ratio
Cash flow management	OIR	Operating income ratio
Shareholding structure	RLSH	Ratio of the largest shareholder holding
	RLSSLS	Ratio of the largest shareholder to the second largest shareholder

Regression Analysis

There is a correlation between profitability and various influencing factors. This paper chooses regression analysis to test it. Since each independent variable is not independent and has a certain degree of dependence on each other, this paper uses a one-way regression analysis to analyse the impact of various factors on profitability. The regression model is as follows:

$$PRO = \alpha + \beta C_i + \delta_i$$

Where C_i is the respective variable, α is the intercept, β is the regression coefficient, and δ is the random error. The regression results are shown in Table-4. Except for *AGTA*, *AGTOI*, *VRA*, *RLSH*, *RLSSLS*, *CR*, all other factors passed the significance test.

The results show that in the formation of profitability, in addition to the company's growth ability and shareholding structure, other factors have a greater impact on profitability.

Table-3: Regression Results

Regression Items	β	T Value	ΔR^2
ART	0.18	1.96*	0.17
TAT	3.35	4.53***	0.58
CAT	2.73	3.46***	0.44
SOI	-12.75	-5.14***	0.64
MOI	-28.41	-2.12**	0.20
NPM	5.09	12.23***	0.91
ATMA	9.89	5.93***	0.71
ALR	-3.44	-3.32***	0.42
CLTD	3.06	5.69***	0.69
OIR	6.02	3.94***	0.51

**, **, * indicates significant at 1, 5 and 10% levels respectively.

As shown in Table-3, when other factors remain unchanged, sales expenses as a percentage of operating income (SOI) and management expenses as a percentage of operating income (MOI) have the greatest impact on profitability. When SOI and MOI increased by one unit, profitability decreased by 12.75 units and 28.41 units, respectively. That is, when other factors remain unchanged, the higher the proportion of sales expenses and management expenses, the weaker the marketing ability and the lower the profitability. According to the analysis, Ctrip's sales expenses from 2004 to 2011 accounted for less than the 2012-2017 revenue ratios. Ctrip created a commission model in the previous stage to fill the gap in the domestic online travel market and conduct appropriate membership points. The marketing activities such as redemption of coupons and gifts to hotels increased the sales volume of platform products and enhance profitability. However, since 2012, competition in the online travel market had intensified, and it had continued to impact Ctrip's market position. Ctrip chose a low-price strategy to maintain market share, which increasing marketing expenditures and sales expenses, and profitability continued to decline. In 2016, when other factors were relatively stable, sales expenses accounted for 30.50% of operating income of operating income, and management expenses accounted for 13.10% of operating income, which both reaching record highs. This is the main reason why the comprehensive profitability of the year was the lowest in the calendar year.

The impact of average of three years after M&A (ATMA) profitability is second. The results show that when other factors remain unchanged, ATMA increases by one unit, and the profitability increases by 9.89 units. That is, the higher the performance of M&A integration, the better the M&A integration ability and the stronger the profitability. According to the analysis, Ctrip's M&A integration performance from 2003 to 2011 was higher than that of 2012~2017. In the previous stage, Ctrip established strategic alliances with airlines, hotels, banks and scenic spots, and complemented and cooperated based on the advantages of both parties to improve product visibility and sales volume and enhance corporate profitability. When other factors changed slightly in 2007, M&A integration performance performed the best in the past years, which was the main reason for the second-highest comprehensive profitability of the year. In the latter stage, Ctrip tried to strengthen its own control over resources through large-scale M&A integration activities, and built a complete tourism ecosystem to form competitive barriers. In the short period of time, a large number of M&A, such as Skyscanner, Taimei Travel, and other domestic and foreign tourism suppliers, and frequent shareholdings such as Tongcheng, Tuniu, and Qunr, had brought great pressure on the company's M&A integration ability, and its profitability had been declining.

Accounts receivable turnover (ART), total asset turnover (TAT) and current asset turnover (CAT) have the least impact on profitability when other factors remain constant. The results show that for every one

unit increase in ART, TAT and CAT, profitability increased by 0.18 units, 3.35 units and 2.73 units, respectively. That is, when other factors remain unchanged, the higher the turnover rate of accounts receivable, the turnover rate of total assets, and the turnover rate of current assets, the stronger the operational capability and the stronger the profitability. According to the analysis, although Ctrip's accounts receivable turnover rate, total asset turnover rate and current assets turnover rate reached the lowest level in 2015, the operating capacity was the worst; but under other factors, the 2015 profitability increased in reversed.

Therefore, operating capacity has less effect on profitability than other factors. Among the remaining influencing factors, the asset-liability ratio (ALR), current liabilities to total debt ratio (CLTD) have an impact on profitability. When other factors remain unchanged, the profitability decreases by 3.44 units, 3.06 units for every one unit increase in the ALR and CLTD, respectively. Since 2012, Ctrip's asset-liability ratio had been rising, and current liabilities had been declining in total debt ratio, indicating that Ctrip need to support large-scale marketing activities and mergers and acquisitions activities with non-current liabilities, resulting in large interest expenses. The profitability had declined. Therefore, the dramatic change in capital structure is one of the main reasons for the decline in profitability. In addition, operating income ratio (OIR) also has an impact on profitability. When other factors remain unchanged, OIR increases by one unit, and profitability increases by 6.02 units. The operating income ratio from 2003 to 2011 was higher than that of 2012 to 2017, indicating that the cash management in the previous stage was stronger than the latter stage. Therefore, the overall profitability performance from 2003 to 2011 was better than 2012 to 2017.

Factors that fail to pass the significance test are: shareholding structure and growth ability. According to Ctrip's 2003-2017 annual report, the management shareholding ratio remained within the range of 5% to 20%, and the shareholding ratio of institutional shareholders remained within the range of 30% to 40%, and the ownership structure was relatively stable. Therefore, in the statistical sense, the shareholding structure had no significant impact on profitability. In addition, the company's growth ability is not limited to the metrics used in this article. The relationship between growth ability and profitability needs further verification.

Through the above analysis, as the domestic online travel market was not mature before 2012, Ctrip's commission model had inherent advantages, and through the appropriate marketing activities and reasonable mergers and acquisitions integration activities, it could continue to consolidate market share. So profitability in 2004 ~ 2011 was positive. Especially

in 2005, its management expenses accounted for the lowest operating rate in the previous year, and reached a cooperation intention with Alibaba, China Eastern Airlines, China Grand Hotel and other companies to expand brand influence and become the leader in ticket booking and hotel reservation market. Therefore, 2005 had the highest profitability. In the beginning of 2012, the online travel market was fiercely competitive, and the trend of decommissioning in the market was obvious, which affected Ctrip's business model and market position. Ctrip chose a low-price strategy, a large number of mergers and acquisitions integration activities and increased financing scale response, in exchange for profits in market share, profitability was negative in 2012-2017. Among them, Ctrip increased sales expenses and management expenses in 2016, which intensified the decline in profitability. Therefore, 2016 had the lowest profitability. After five years of price wars, the online travel market had returned to stability, and Ctrip has shifted from low-price competition to platform services and brands. In 2017, profitability has rebounded. On the whole, the poor marketing ability, the decline in M&A integration ability, the lack of operational capability, the drastic changes in capital structure and poor cash flow management are the main reasons for Ctrip's decline in profitability from 2012 to 2016.

RESEARCH CONCLUSIONS AND MANAGEMENT IMPLICATIONS

Based on the main business activities of the development of OTA, this paper starts from the innovation of platform business model, marketing activities, constructing tourism ecosystem and continuous financing, and constructs the theoretical analysis framework of online travel enterprise profitability. Taking Ctrip as an example, we analysed the correlation between profitability and the above-mentioned influencing factors through one-way regression. The study found that when other factors remain unchanged, sales expenses as a percentage of operating income has the biggest impact, followed by M&A integration performance. Accounts receivable turnover, total asset turnover and liquidity asset turnover has the least impact. At the same time, the asset-liability ratio, the ratio of current assets to total liabilities, and the operating income ratio also have an impact on profitability. The main reasons for Ctrip's poor profitability in 2012~2016 are: poor marketing capabilities, reduced M&A integration capabilities, lack of operational capabilities, dramatic changes in capital structure and poor cash flow management. According to the results of data analysis, the following five suggestions are proposed for online travel companies to improve their profitability:

- OTA must reasonably control sales costs and form effective marketing capabilities. Online tourism enterprises should balance the cost and income structure in marketing activities, strengthen the effectiveness of marketing activities, pay attention

to how to convert platform traffic into actual purchasing power, increase sales net profit margin, and lay a solid foundation for building a solid tourism ecosystem;

- They need continue to strengthen the ability to integrate mergers and acquisitions. OTA and tourism suppliers should deepen integration in resources, channels, research and development, marketing and other elements, build a core resource system, and constantly improve the tourism ecosystem;
- Managers must promote the continuous innovation of the platform business model, improve enterprises operational capabilities. OTA should pay close attention to the value appeals of tourism consumers and tourism suppliers on the platform, strengthen the ability of platform data analysis, the ability of accurate combination of goods and the perception of market demand [32];
- OTA need to adjust capital structure and strengthen cash flow management. They should rationally arrange the capital structure, choose the right timing, scale, price and distribution method, formulate detailed fundraising plans and financial management strategies, moderately borrow money, and reduce financing costs as much as possible [33]. Do a good job in cash flow forecasting and control during the start-up period and growth period, and grasp the matching relationship between financing and investment cash flow [34];
- Shareholders should maintain the stability of the equity structure. In the process of continuous financing of online travel enterprises, the management must firmly grasp the control of the enterprise, maintain the consistency of management decisions, and continuously improve the profitability of the enterprise.

Insufficient and Future Prospects

As an exploratory study on the profitability of online travel companies and its influencing factors, this paper may have the following two limitations. First, OTA enterprises realize value creation and transmission by promoting valuable interaction activities between tourism suppliers and consumer groups. Therefore, considering the characteristics of platform-based enterprises, future research can include relevant indicators to measure the quality of interactive activities, such as sales conversion rate, user loyalty, etc., to build a more comprehensive analysis framework for the profitability of online travel companies. Second, Although the one-way regression analysis proves the correlation between profitability and various influencing factors, more sample data is needed for overall analysis to provide better management suggestions for management practice.

REFERENCES

1. Zhang B. A comparative analysis of China-U. S. industrial competitiveness based on products' hierarchy differ. *Commercial Research*, 2016; (8), 16-24.
2. Wang JT, Huang MN. Research on correlation between industry competition, brand information disclosure and enterprise value. *Communication of Finance and Accounting*, 2018; (24), 66-69.
3. Hao JX, Yu Y, Law R, Fong DKC. A genetic algorithm-based learning approach to understand customer satisfaction with OTA websites. *Tourism Management*, 2015;48, 231-241.
4. Zou GY, He JM. Research on low price competition and the vertical restraint of online travel business and the government regulation. *Tourism Tribune*, 2017; 32(3),11-19.
5. Li YP, Duan GP, Shen HY, Wang J, Huang C. Recommendations for online travel market regulation policies: Based on the survey of main tourism websites. *Academic Exchange*, 2013; (S1), 88-91.
6. Xie LS, Guan XH. An exploratory study of Customer Need Knowledge (CNK) of E-Travel service providers: Based on a survey of E-Travel service providers and customers. *Tourism Science*, 2013; 27(03),1-17.
7. Kadira G, January C, Gochero P. Determinants and Effect of Commercial Bank Profitability in Zimbabwe (2009-2013). *European Journal of Business and Management*, 2015; 7(30), 78-83.
8. Almazari AA. Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan. *Journal of Applied Finance & Banking*, 2014;4(1), 125-140.
9. Ball R, Gerakos JJ, Linnainmaa JT, Nikolaev VV. Accruals, cash flows, and operating profitability in the cross section of stock returns. *Social Science Electronic Publishing*, 2016; 121(1), 28-45.
10. Danis A, Rettl DA, Whited TM. Refinancing, profitability, and capital structure. *Journal of Financial Economics*, 2014; 114(3), 424-443.
11. Wang MS, Liu XF. Research on the impact of income structure of commercial banks on profitability: Analysis based on panel data of 14 listed banks in China. *Nankai Business Review*, 2013;16(2),143-149.
12. Chaudron, Raymond FDD. Bank\'s interest rate risk and profitability in a prolonged environment of low interest rates. *Journal of Banking & Finance*, 2018; 89, 94-104.
13. Arunachalam S, Ramaswami SN, Herrmann P, Walker D. Innovation pathway to profitability: the role of entrepreneurial orientation and marketing capabilities. *Journal of the Academy of Marketing Science*, 2018;46(3), 1-23.
14. Gu Y. An Empirical Study on the effect of the equity structure of domestic securities companies on their profitability. *Systems Engineering*, 2015;

- 33(2), 82-86.
15. Peng JL, Jeng V, Wang JL, Chen YC. The impact of bancassurance on efficiency and profitability of banks: evidence from the banking industry in Taiwan. *Journal of Banking & Finance*, 2017; 80, 1-13.
 16. Gu L, Huang D. The effect of the growth in labor hours per worker on future stock returns, hiring, and profitability. *Review of Finance*, 2016; 21(06), 2249- 2276.
 17. Liu GS, Yue FF. Enterprise characteristics and the choice of refinancing way: Based on the empirical data of Chinese listed companies from 2007 to 2015. *On Economic Problems*, 2017; (8), 50-55; 62.
 18. Aydemir M, Haykır G, Battal A, Jankus V, Sugunan SK, Dias FB, Al-Attar H, Türksoy F, Tavaslı M, Monkman AP. High efficiency OLEDs based on anthracene derivatives: The impact of electron donating and withdrawing group on the performance of OLED. *Organic Electronics*. 2016 Mar 1;30:149-57.
 19. Mackelprang AW, Habermann M, Swink M. How firm innovativeness and unexpected product reliability failures affect profitability. *Journal of Operations Management*, 2015; 38, 71-86.
 20. Aissa SB, Goaid M. Determinants of Tunisian hotel profitability: The role of managerial efficiency. *Tourism Management*, 2016; 52, 478-487.
 21. Bardolet D, Brown A, Lovallo D. The effects of relative size, profitability, and growth on corporate capital allocations. *Journal of Management*, 2017;43(8), 2469-2496.
 22. Li L, Zhao XD, Jian ZQ. Operation strategy of platform enterprises in network environments. *Journal of Management Sciences in China*, 2016; 19(3), 15-33.
 23. Yang S. Evaluation and demonstration of enterprise's marketing ability. *Statistics & Decision*, 2017; (6), 186-188.
 24. Wang Q. Research on the platform ecosphere and the finance ecosphere of internet enterprise-From the perspective of value together. *Studies of International Finance*, 2014; (11), 76-86.
 25. Xu SY, Zhang Q, Li J. The analysis of operating ability of strategic emerging industries-Evidence from listed firms in Sichuang and Shanghai. *Friends of Accounting*, 2016; (10), 44-48.
 26. Zhang H, Zhou ZX, Zhuang BC. The relationship between marketing capability and enterprise's technological innovation: An empirical research on listed companies in Small and Medium Enterprise Board. *Science and Technology Management Research*, 2015; 35(7):119-124.
 27. Yang GD, Zhang CC, Chen HW. Internal control, integration ability and performance in merger and acquisition -- Empirical evidence from Chinese listed firms. *Auditing Research*, 2014; (3), 43-50.
 28. Chen CF, Zhu Y. Empirical study on profitability and influencing factors of Chinese pharmaceutical manufacturing enterprises. *Reform of Economic System*, 2008; (3), 87-91.
 29. Dong XD. Trend of capital structure in listed firms. *Finance and Accounting Monthly*, 2018; (11), 79-85.
 30. Xu YF, Shao SH. Empirical study of financial crisis warning model design for small and medium-sized enterprises. *Friends of Accounting*, 2017; (12):31-34.
 31. Yang L. Equity structure, cognitive diversity of TMT and entrepreneurial orientation. *Science Research Management*, 2014; 35(5), 93-106.
 32. Wen J, Yan ZJ. The development of cross-board e-commerce in China: New characters, new issues and new tendency. *Journal of International Economic Cooperation*, 2017; (11), 29-35.
 33. Wang J, Zhang Y. The relationship between capital structure and profitability: An empirical research on real-estate industry. *Dongyue Tribune*, 2015; 36(2): 140-146.
 34. Chen XM, Xu HY. The strategic cost management of E-commerce enterprises in China on the stage of start-up and growth: Evidence from Jiuxian. *Finance and Accounting Monthly*, 2017; (31): 82-87.