

Financial investment in marketing and the performance in China

Li-Wei Lin¹, Xiao-Hui Zhou², SHIH-YUNG WEI³

¹Department of Finance, Shanghai University of Finance and Economics Zhejiang College, China, ORCID:
<https://orcid.org/0000-0002-1937-8244>

²Department of Finance, Shanghai University of Finance and Economics Zhejiang College, China,
(Corresponding Author)

³School of Mathematics Statistics, Shaoguan University, Shaoguan City, Guangdong, China

DOI: <https://doi.org/10.56293/IJMSSSR.2024.5101>

IJMSSSR 2024

VOLUME 6

ISSUE 4 JULY - AUGUST

ISSN: 2582 - 0265

Abstract: The main focus of this article is to examine the relationship between financial investment in marketing and the performance of non-financial listed companies in China over the period from 2007 to 2019. The research utilizes correlation analysis and panel data collection to investigate this relationship among a sample of 32,442 companies. The study employs regression equation models for analysis.

The research explores how financial investment in marketing impacts a company's overall performance, as measured through the Tobin's Q ratio. It considers various variables, including endogenous and control variables. The control variables include company size, debt ratio, and the length of rigor, which are observed to assess the performance of the companies.

The primary focus of the study is on non-financial listed companies in China. The findings of the research indicate that after incorporating marketing investment (MI), there is a deferred effect on the company's performance, which becomes evident in the third year. This suggests that financial investments in marketing have a positive and significant impact on corporate performance, particularly after three years of implementation.

In summary, this article investigates the relationship between marketing investment and company performance in non-financial listed companies in China, emphasizing the delayed effects of marketing investments on a company's overall performance, which become more pronounced in the third year following the investment.

Keywords: Time Series Analysis Methods, ductility, corporate performance, marketing strength

1. Introduction

The article appears to focus on the impact of China's economic development and government policies on the internationalization of Chinese enterprises. Specifically, it seems to investigate whether there is a positive relationship between marketing intensity and corporate performance during the period from 2007 to 2019.

Here's a breakdown of the key points and objectives:

Background and Context: The article discusses China's economic development from 2001 onwards and the government's encouragement for Chinese enterprises to expand globally.

Research Objective: The primary goal of the research is to analyze and measure whether there is a positive relationship between marketing intensity and corporate performance in Chinese non-financial companies, with a focus on whether marketing inputs have a delayed or deferred effect on performance.

Methodology: The research employs large-scale panel data analysis using data from 2007 to 2019. It applies interdisciplinary approaches, including marketing, financial management, and econometrics, to study the

relationship. The use of panel data and time series analysis indicates a comprehensive approach to examining the issue.

Innovation: The research claims to offer an innovative contribution to the field by exploring the delayed effect of marketing investments on corporate performance, a topic that has received limited attention in both domestic and international literature.

Model Development: The article mentions the development of a financial deferred effect model, which suggests that it will analyze how marketing investments made at one point in time affect future corporate performance.

Hausman Test: The use of the Hausman test is mentioned, which is likely employed to assess the appropriateness of the model and the data used.

Time Series Analysis: The research applies time series analysis to examine overall trends and forecast future implications for corporate performance. This suggests that it aims to provide insights into the long-term impact of marketing investments on company performance.

In summary, the article seeks to investigate the impact of marketing intensity on the performance of Chinese non-financial companies, particularly focusing on whether marketing inputs exhibit a deferred effect. It utilizes a combination of data analysis methods, interdisciplinary approaches, and innovative modeling techniques to contribute to the existing body of knowledge in this field. The research aims to provide insights into how marketing investments influence corporate performance over time, which could have implications for businesses operating in China's globalized market.

It seems that the article is addressing the relationship between marketing expenditures, referred to as "marketing strength," and the financial management and overall performance of non-financial listed companies in China. The study aims to investigate whether marketing expenditures have a deferred effect on company performance.

Here are the key points and objectives highlighted in the text: **Marketing Strength Variables:** The paper emphasizes that few studies have explored the impact of marketing expenses on financial management from this perspective. Marketing strength is quantified by the ratio of marketing expenses to operating income.

Deferred Effect Hypothesis: The research is based on the hypothesis that marketing strength can influence financial projects and reduce a company's costs, potentially leading to a deferred effect on corporate performance. The concept of marketing strength is generally seen from a marketing perspective, but its impact on overall company performance is often overlooked in academic and management applications.

Empirical Analysis: The study employs empirical analysis to examine the significant effect of marketing strength on financial aspects. It also mentions how companies may reduce logistics and integrate advertising costs into marketing strength from a financial standpoint. **Variables and Control Variables:** The research utilizes various variables, including marketing strength as the explanatory variable, company performance as the explained variable, and control variables such as company size, debt ratio, and the length of time the enterprises have been in operation for data observation and analysis.

Time Period: The data analysis covers the years from 2007 to 2019, focusing on non-financial listed companies in China. It highlights the importance of examining whether there is a deferred financial effect from marketing investments, as this effect might not be immediately visible in financial accounting, potentially leading to a lack of attention to marketing investments in decision-making.

Unique Aspect of Chinese Accounting: The study points out that China's accounting system has differences compared to accounting systems in Western countries, making the examination of marketing investments in the context of non-financial industries in China an interesting and relevant topic.

Importance of Non-Financial Industry: The text mentions that the non-financial industry in mainland China has

often been overlooked in previous studies, which underscores the significance of investigating this sector.

In summary, the article focuses on the financial implications of marketing strength and whether marketing expenditures have a deferred effect on the performance of non financial companies in China. It aims to shed light on how marketing investments can impact company financials and overall performance, especially considering the unique aspects of China's accounting system and the relatively limited attention given to non financial industries in previous research.

2. Literature review

2.1. The intensity of marketing

Marketing strength in the thesis many research scholars before using this a few variables, we mainly in the marketing strength deferred to see whether it will affect? Marketing strength of the input is a very interesting topic, we mainly would see its impact on corporate performance? Before the study mainly from the perspective of science and technology company financial deferred effect, our research has broken the traditional is China's non-financial perspective for analysis. Marketing is very difficult to measure in financial strength of a variable, because marketing strength belongs to a concept and perspective of a variable, but in many bosses in the financial statements the marketing strength into the marketing data. Rigby and Bilodeau (2011) points out that the marketing innovation ability will influence the overall performance of the company. Japanese companies mainly on marketing innovation to integrate the development of new products and product technical innovation, such a marketing strength financially very few people were noticed. Our market to analyze the marketing strength in China, the most main is related to the whole Chinese enterprises' financial statements, many businesses ignore the marketing strength can be done with product technology innovation, led to many Chinese companies still do OEM on traditional thinking. Slater and Narver (1995) proposed the product innovation and marketing to do combination, including the innovation on the process can increase the enterprise's competitiveness.

2.2. Corporate performance

Corporate performance for the whole company operation has a very important concept, the company performance in the company's operations in the future there is a important concept. Company performance in the company's financial concept belongs to an operational indicator, can go to see the company's overall health and condition. Corporate performance for the Angle of financial played an important role, this situation will affect the effect of the overall financial performance. We have a further development on corporate performance model, we applied the Hausman (1978) proposed the card verification test, basically see the whole company can be accurate to test the performance and application performance. Corporate performance for an enterprise, has the very important key factors and results. Hegland (2018) proposed the corporate performance from the company's organizational members and members of the board of directors, the direction of the company and decisions will affect the company's annual performance as a whole. Recently many global enterprises business scandal broke out, Carter (2003) proposed the members now enterprise management will affect the overall corporate performance results.

We research on the company size, debt ratio and length of enterprises set up variables in discussion. The heaviest if want to see the whole company some indicators, we will often pull a decade in financial time series, the condition of 20 years to see the whole company.

3. Research data and the method

This research study in 2007-2019 (system of accounting of China in 2007, substitution of IFRS) during the 13 years non-financial listed companies in China, excluding missing data a total of 32442, a total of 3682, in each of the number of distributions such as table 1.

From table 1 shows the research along with the increase of the year, the sample also will increase, because the study period there are American company, has not been so the total number of each year up to 3682.

3.1. The research methods

According to the introduction, this study for the study of 13 years, 3682 companies, so belong to panel data, so the method can be used in a panel data analysis, the surface of this data at the same time has the cutting surface and time series data, virtually makes the larger sample sizes, increasing test statistics of freedom and estimate the validity of the results, although there panel data of time series data, but there was no single time series often happen problem, using panel data analysis has many advantages, the most important thing is that he may reduce the problem by endogenous variables, selected fixed effect panel data analysis, the final choice is or random effect, it generally adopt Hausman (1978) proposed the card verification test.

But panel data is not necessarily USES the panel data analysis is the best, but some panel data, using regression analysis will be better, so the general regression analysis and panel data analysis, this study adopts the pooled reg. Analysis, which is pooled regression after comparing the weighted and unweighted statistic, generally weighted R - squared must be greater than the amount of unweighted R², and weighted SSE (the Sum of squared resid) must be the school in unweighted SSE, using panel data analysis to the most appropriate.

3.2. The research variables

You study of this research marketing costs of inputs will have deferred effect to enterprise's performance, as outlined in the introduction of marketing investment, often need a lot of money, if there are threshold effect is also one of the focus of this study So the research variables of this study is divided into three kinds, as explained variable, this study adopts the marketing strength to represent the status of the marketing investment. Be explained variable to corporate performance, this study used market performance - Tobin's Q to represent. Regression analysis, often because of the endogenous variable without notice, and lead to the results of the analysis error, although the panel data analysis can reduce the problem of the endogenous variable, but this study in order to make the research closer to reality, so join the three researchers commonly used control variables.

3.2.1. Variable - marketing strength (MI)

This study adopts the current marketing strength marketing expenses divided by operating income to measure as follows

$$MI(t-j)_i = \frac{MK(t-j)_i}{S(t-j)_i} \times 100 \quad (1)$$

$MI(t-j)_i$: Marketing costs in company i from period t-j, j=0,1,2,3,4

$S(t-j)_i$: Operating income in company i from period t-j, j=0,1,2,3,4

Source: each big company annual report and calculated in this study

3.2.2. Be explained variable

Corporate performance generally have points, operating performance and market performance, this study employs to measure the effect of marketing strength, market performance and market performance is often use Tobin's Q, but Tobin's Q data cannot (heavy cost, the market value of debt), so this study is to use modified by using La Porta et al. (2002) proposed Proxy Q.

$$CP(t)_i = Proxy Q(t)_i = \frac{ME(t)_i + BD(t)_i}{BA(t)_i} \times 100 \quad (2)$$

$ME(t)_i$: Equity to market value (common + preferred shares) in company i from

period t

$BD(t)_i$: Total liabilities on book in company i from period t

$BA(t)_i$: Total assets on book in company i from period t

Source: each big company annual reports, Shanghai, shenzhen stock exchange and calculated in this study

Market performance tend to be different from the reaction of the business performance results, performance often USES the ROA and ROE, ROA of the assets investment reward, ROE refers to discuss the benefit of shareholders, so this research adopts the ROA management performance.

$$ROA(t)_i = \frac{\pi(t)_i}{AA(t)_i} \times 100 \quad (3)$$

$\pi(t)_i$: Net interest rate before interest and tax in company i from period t

$AA(t)_i$: Average book equity in total assets in company i from period t and t-1

Source: each big company annual report and calculated in this study

3.2.3. Control variables

Control variable is one of the most commonly used company size, debt ratio and enterprises established the length of time. This study will adopt the three variables, but will change a little.

(1) the company size (SC)

Larger manufacturers usually can be seen as a general manufacturer have the ability to obtain higher than normal profit rate, so can be in a not perfect market operating, through its monopolistic or oligopolistic, can obtain higher excess profit. Moreover, large companies may be in the capital markets at a relatively low cost to obtain funds, or because of the relationship between diversification, through lower operating costs in the market. The company size has effect on performance, when the company's size, the greater the easier to play to the advantages of economies of scale, tend to do better business performance. Therefore, the company size will be set as control variable, and the company size measure including the total asset, total revenue, and number of employees (Kotabe et al., 2002; Lu and Beamish, 2004; Chari et al., 2007; Bae et al., 2008). And usually use the company's total assets or job take natural logarithm as the proxy variable costs.

$$SC(t)_i = \ln(BA(t)_i) \quad (4)$$

Source: each big company annual report and calculated in this study

(2) the debt ratio (DA; ER)

Capital structure (especially the liabilities) is considered to be of firm performance and

manufacturers operating risk is one of the important determinants of (Hiwt and Smart, 1994). And Myers (1977) pointed out that the earliest debt ratio on the one hand, implicit corporate tax shield message, on the one hand, according to the Pecking Order going, the higher the debt ratio, the lower profitability, the smaller the value of the company.

Debt ratio calculations are commonly adopting total liabilities divided by total assets, excluding debt of enterprises, the debt ratio is between 0-100%, for proportional relationship, this study will cover this variable into

property scale disease take natural logarithm, to study the numerical relationship can be more close to normal distribution.

$$ER(t)_i = \ln \left(\frac{BD(t)_i}{BE(t)_i} \right) \times 100 \quad (5)$$

$BD(t)_i$: Total liabilities on book in company i from period t

$BE(t)_i$: Total equities on book in company i from period t

Source: each big company annual report and calculated in this study

(3) the enterprise set up the length

Control of endogenous variable in the distinction between the performance of companies often use this variable to replace, because of some factors on the China, this study adopt enterprise listed the length of time as a substitute. Longer listed companies more mature, whether in the access to information, still have more experience on the resource integration, it can through the enterprise internal management process affect the performance of the enterprise. In addition, the Chinese securities laws before the listed company to qualify for profitable for three consecutive years, therefore, listed in the morning and evening reflects the point of corporate profits. On the other hand, listed companies play a propaganda role, can improve enterprise's popularity, therefore listed age may also affect the value of the company. Therefore, this article will choose the variable control time to market impact on financial performance.

Duration on the market (AG)

$$AG(t)_i = \frac{DATA(t)_i - IPO_i}{365} \quad (6)$$

$DATA(t)_i$: The current period 12/31 in company i

IPO_i : Time of IPO

Source: each big company annual report and calculated in this study

In addition, this study intends to research marketing strength of the threshold effect, therefore this research intends to adopt virtual variables instead of all the marketing strength sorted points by 5 groups, therefore it is necessary to establish four dummy variables

$$,D2,D3,D4)= \begin{cases} (0,0,0,0) \text{Marketing intensity between}(0\%, 20\%) \\ (1,0,0,0) \text{Marketing intensity between}(20\%, 40\%) \\ (0,1,0,0) \text{Marketing intensity between}(40\%, 60\%) \\ (0,0,1,0) \text{Marketing intensity between}(60\%, 80\%) \\ (0,0,0,1) \text{Marketing intensity between}(80\%, 100\%) \end{cases} \quad (7)$$

3.3. Build a model

Through the research methods and research variables, this study established four models as follows, model 1, 2, deferred effect, model 3, 4, discuss the threshold effect, the model is 5, 6 complete further analysis of the effect of deferred effect and the threshold effect.

MODEL I MCP: Tobin's Q = $\beta_0 + \sum_{j=0}^3 \beta_{j+1}MI(t-j) + \beta_5SC + \beta_6ER + \beta_7AG$ (8)

MODEL II BCP: ROA = $\beta_0 + \sum_{j=0}^3 \beta_{j+1}MI(t-j) + \beta_5SC + \beta_6ER + \beta_7AG$ (9)

MODEL III MCP: Tobin's Q = $\beta_0 + \sum_{k=1}^4 \beta_{k+1}D_k \cdot MI(t) + \beta_6SC + \beta_7ER + \beta_8AG$ (10)

MODEL IV BCP: ROA = $\beta_0 + \sum_{k=1}^4 \beta_{k+1}D_k \cdot MI(t) + \beta_6SC + \beta_7ER + \beta_8AG$ (11)

MODEL V MCP: Tobin's Q = $\beta_0 + \sum_{j=0}^3 \beta_{j+1}MI(t-j) + \sum_{k=1}^4 \sum_{j=0}^3 \beta_{j+1}D_k \cdot MI(t-j)$
 $+ \beta_{21}SC + \beta_{22}ER + \beta_{23}AG$ (12)

MODEL VI BCP: ROA = $\beta_0 + \sum_{j=0}^3 \beta_{j+1}MI(t-j) + \sum_{k=1}^4 \sum_{j=0}^3 \beta_{j+1}D_k \cdot MI(t-j)$
 $+ \beta_{21}SC + \beta_{22}ER + \beta_{23}AG$ (13)

3.3.1. Data collection

This research study sample of 32442, the empirical analysis the most worry about the effects of extreme value, cause the results of the analysis error (although the panel data analysis can slow the effect of extreme value, but delete directly affect smaller), so this study intends to delete some extreme value, by the histogram of each variable (as shown in figure 1) can be found that there are the existence of extreme value, thus to delete.

Delete variable MI more than 60, 122 (in the final analysis is more than 60 with general normal difference), the market performance is more than 200, 81, five business performance is more than 200, delete a total of 208 as the research sample of 0.6% less than 1%.

After deletion, the distribution of samples in this study for each year is shown in Table 2.

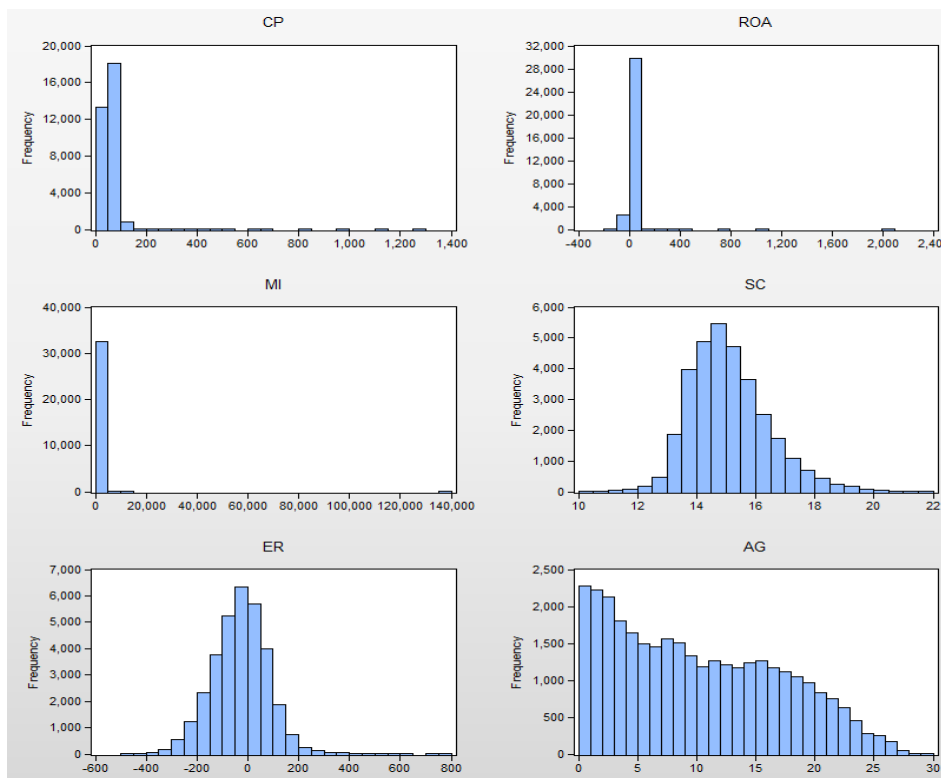


Figure 1. The parameters histogram

Table 2. The annual distribution of sample number after data collation in this study

year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
NS	1460	1536	1618	1957	2251	2424	2425	2524	2737	2957	3390	3467	3488	32234

4. The empirical analysis

According to the research method of this study, the empirical analysis is divided into three parts, divided into pooled analysis reg. determine whether the data of this study USES the panel data analysis, general regression analysis can be used if not suitable for the young, if you use for the next Hausman Test assessment of the effect is fixed or random effect, finally choose the optimal model to explain. The empirical analysis should be preceded by basic analysis, such as narrative statistics analysis and correlation matrix analysis. Therefore, this chapter is divided into five sections.

4.1. Uni-variable Analysis

The research data in this study were from 2007 to 2019. Due to the deferred effect, the research period of deferred effect was pushed forward 3 years, so the research period of deferred effect was from 2010 to 2019. The narrative statistics analysis of the two groups of variables was carried out as shown in Table 3 and Table 4.

Table 3. Descriptive statistics of the study sample from 2007 to 2019

	CP	ROA	MI	SC	ER	AG
Obs.	32234	32234	32234	32234	32234	32234
Mean	55.28	6.44	7.04	15.12	-31.69	10.06
Med.	55.58	6.00	4.28	14.94	-27.82	9.05
Max.	199.78	185.35	59.97	21.73	755.39	29.08
Min.	1.23	-183.95	0.00	10.48	-494.33	0.00
Std. D.	23.84	8.35	8.39	1.33	108.10	6.98
Sk	0.51	-0.57	2.63	0.80	0.01	0.38
K	4.55	48.68	11.47	4.13	3.98	2.06

After the deletion of the extreme value. The narrative statistics of the sample size of all the studies were abnormally straight. Table 4 shows the narrative statistics of the research samples studying the deferred effect. During the 3-year study period, any missing data will not be included in the research scope, so the number of research samples decreased from 32,234 to 21,566. But in general, the numbers don't change much. A situation is also presented in Table 4. During the study period of 4 years, the average of marketing intensity gradually increased with time. In addition to the left-skewed ROA in all the samples, the other variables were right-skewed. It is found that the length of time to market is the low broad peak, and the other variables are the high gorge peak.

Table 4. Narrative statistics of the study sample from 2010 to 2019

	CP	ROA	MI	MI(-1)	MI(-2)	MI(-3)	SC	ER	AG
Obs.	21566	21566	21566	21566	21566	21566	21566	21566	21566
Mean	57.02	5.48	6.97	6.85	6.74	6.62	15.42	-18.18	12.59
Med.	57.40	5.24	4.18	4.17	4.15	4.12	15.26	-15.59	12.21
Max.	199.00	120.82	59.89	59.03	59.90	59.53	21.73	735.05	29.08

Min.	1.23	-183.95	0.00	0.00	0.00	0.00	10.48	-494.33	3.00
Std. D.	22.54	8.31	8.43	8.19	7.98	7.81	1.34	103.89	6.39
Sk	0.55	-2.23	2.62	2.63	2.64	2.70	0.67	0.06	0.24
K	5.07	40.99	11.30	11.45	11.70	12.22	4.06	4.17	

4.2. Bi-variable Analysis

Table 5. The correlation coefficient matrix table of the variables was studied

	CP	ROA	MI	SC	ER	AG
CP	1	-0.14	-0.13	0.18	0.71	0.25
ROA		1	0.05	0.02	-0.25	-0.16
MI			1	-0.16	-0.22	-0.09
SC				1	0.43	0.34
ER					1	0.35
AG						1

The correlation coefficient matrix can first judge the degree of correlation between two variables and find out whether there is contribution between explanatory variables in advance. It can be seen from Table 5 that there is no high correlation between explanatory variables and control variables in this study, which can eliminate the problem of collinearity.

4.3. Pooled Analysis

This study using Pooled analysis to determine whether the sample USES the panel data analysis for the best, the analysis results such as table 6, found the sample of this study in six models, all of the weighted R2 Statistics are bigger than the unweighted and weighted SSE Statistics also smaller than unweighted, military and six of this study are listed in the table model using panel data analysis.

Table 6. pooled analysis results table

	R ² Statistics		SSE Statistics	
	Weighted	Unweighted	Weighted	Unweighted
MODEL I	0.86	0.53	4691761	5186697
MODEL II	0.59	0.09	1337325	1350228
MODEL III	0.83	0.5	8111658	9125398
MODEL IV	0.69	0.09	2022867	2042040
MODEL V	0.88	0.53	4637052	5188315
MODEL VI	0.62	0.09	1321621	1348023

4.3.1. Hausman Test

Hausman Test is a chi-square Test. After the random effect is completed, it is determined whether it conforms to the random effect. In other words, when the p-value is greater than 0.05, the random effect is applicable to the model; otherwise, the fixed effect is the best interpretation. The verification results are shown in Table 7, and it is found that the models in this study are all applicable to the interpretation of fixed effects.

Table 7. Hausman test results table

	χ^2 Statistic	χ^2 d.f.	Prob.
MODEL I	90.09	7	<0.001

MODEL II	964.08	7	<0.001
MODEL III	74.72	8	<0.001
MODEL IV	991.20	8	<0.001
MODEL V	134.38	23	<0.001
MODEL VI	1024.00	23	<0.001

4.4. Panel Data Analysis

The research model of this study studied threshold effect and deferred effect at the same time, so model V and VI had 23 variables. In order to facilitate the completeness of the table, the table was divided into two parts. The first part was the basic information of the regression model. Dependent Variable Sample Periods Periods included Cross-sections included Total panel observations R-squared F-statistic and Prob(F-statistic) , As shown in Table 8, the Coefficient t-statistic and verification results of all variables for panel data analysis (fixed effect) are shown in Table 9.

Table 8. Panel data analysis

MODEL	I	III	V	II	IV	VI
Dependent Variable	CP			ROA		
Sample Periods	2007-2019	2010-2019		2007-2019	2010-2019	
Periods included	13	10		13	10	
Cross-sections included	3680	3007		3680	3007	
Total panel observations	32234	21566		32234	21566	
R-squared	0.54	0.56	0.56	0.11	0.13	0.13
F-statistic	1900.82	1680.87	848.71	207.36	198.81	101.74
Prob(F-statistic)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

In the individual analysis of the threshold effect (Model III) and the deferred effect (Model III IV), it can be found that the threshold effect and the deferred effect do exist.

For market performance, because did not join the virtual variable MI is not significant, so the virtual variable is an significant positive and negative results for each group, so the coefficient threshold effect (20-60%) among marketing strength negative significant influence (0.67, 0.59), and low investment in marketing is is not significant, higher marketing spending (60-100%) cannot significantly negative.

The business performance also changed from positive non-significant to negative non-significant to negative significant (-0.27, -0.29).

For deferred effect, market performance can only see significant positive effect (0.06) in the third year after input, while business performance is negative effect (-0.18) in the year of input, and positive significant effect can only occur in the following three consecutive years (0.11, 0.06, 0.08).

However, the overall analysis results are still based on Model V and VI. In order to facilitate the comparative analysis, only the variables discussed in Table 10 and whether they are significant are also drawn in this study (significant is indicated in bold). Comprehensive analysis of the empirical results both market performance or threshold effect exist, in terms of market performance, and of course in marketing cost performance will be unfavorable to the market condition (0.92), but increased along with the cost of investment, adverse effect gradually reduce (0.80, 0.78, 0.57, 0.93), and then a few years start is of significant influence on market performance (0.24, 0.29, 0.35), but the cost of marketing input if too little, next year with the next two years may produce adverse effects of (0.36, 0.30). Does this feel like the company did a marketing trick and suddenly didn't

do it so that consumers don't feel good?

For the performance of the business point of view, deferred effect is more apparent, marketing investment in those days there was no significant influence, next year with the next two years began to have a significant positive impact (0.17, 0.22), but with the investment proportion bigger, smaller influence first and then turn to big (2 years - 0.32, 0.27, 0.12, 0.14), the next three years see only 60-80% of the enterprise marketing performance as well as significantly influence on the company (0.13). This seems to indicate that marketing investment needs expenses, which will dilute profits, while marketing activities can bring profits to the company. Too little investment is not good for the long-term development of the company, and too much investment will dilute profits. Only when the investment is "just" good, will it have positive help for the company's business performance.

Table 9. Fixed effect analysis results table

MODEL	I	III	V	II	IV	VI	
Dependent Variable	CP			ROA			
Variable	Coefficient	t-Statistic	Test				
C	102.60 (82.29)	*** (75.12)	*** (72.83)	-12.67 (-20.88)	*** (-30.11)	-21.09 (-29.00)	*** (-29.00)
MI	0.32 (0.98)	-0.04 (-1.21)	-0.92 (-2.34)	0.24 (1.49)	-0.18 (-11.16)	-0.12 (-0.58)	***
MI(-1)		-0.03 (-0.78)	0.24 (1.75)	*	0.11 (5.16)	0.17 (2.34)	**
MI(-2)		0.06 (1.56)	0.29 (2.62)	***	0.06 (2.63)	0.22 (3.88)	***
MI(-3)		0.06 (1.83)	0.35 (4.17)	*	0.08 (4.82)	0.04 (0.84)	***
D1*MI	-0.67 (-2.41)	**	0.80 (2.08)	** (-1.26)		0.13 (0.66)	
D1*MI(-1)			-0.36 (-1.84)	*		0.05 (0.54)	
D1*MI(-2)			-0.30 (-1.90)	*		-0.32 (-3.92)	***
D1*MI(-3)			-0.31 (-2.23)	**		0.05 (0.67)	
D2*MI	-0.59 (-2.03)	**	0.78 (2.01)	** (-1.90)	*	-0.04 (-0.21)	
D2*MI(-1)			-0.47 (-2.45)	**		-0.03 (-0.26)	
D2*MI(-2)			-0.09 (-0.57)			-0.27 (-3.13)	***
D2*MI(-3)			-0.42 (-3.09)	***		0.09 (1.32)	
D3*MI	-0.47 (-1.54)		0.57 (1.47)		-0.29 (-1.92)	-0.27 (-1.38)	
D3*MI(-1)			-0.27 (-1.57)			0.01 (0.13)	
D3*MI(-2)			-0.22 (-1.48)			-0.12 (-1.65)	*
D3*MI(-3)			-0.16 (-1.40)			0.13 (2.14)	**
D4*MI	-0.28		0.93		-0.22	-0.01	

	(-0.88)		(2.37)	**	(-1.38)				(-0.05)
D4*MI(-1)			-0.22						-0.10
			(-1.47)						(-1.34)
D4*MI(-2)			-0.25						-0.14
			(-1.97)	**					(-2.13)
D4*MI(-3)			-0.39						0.02
			(-4.01)	***					(0.36)
SC	-2.82	-2.82	-2.82		1.29		1.67		1.67
	(-35.52)	*** (-32.41)	*** (-2.15)	***	(33.33)	***	(37.21)	***	(36.82)
ER	0.17	0.17	0.17		-0.02		-0.03		-0.03
	(171.05)	*** (150.45)	*** (150.60)	***	(-49.24)	***	(-43.85)	***	(-44.01)
AG	0.11	0.09	0.08		-0.12		0.00		0.00
	(7.82)	*** (5.40)	*** (4.59)	***	(-16.75)	***	(-0.24)		(-0.48)

Table 10. Table of significant condition of threshold and deferral effect coefficient

Variable	D1	D2	D3	D4	0-20%	20-40%	40-60%	60-80%	80-100%		
MCP	MI	-0.92	0.80	0.78	0.57	0.93	-0.92	-0.12	-0.14	-0.36	0.01
	MI(-1)	0.24	-0.36	-0.47	-0.27	-0.22	0.24	-0.12	-0.23	-0.03	0.02
	MI(-2)	0.29	-0.30	-0.09	-0.22	-0.25	0.29	-0.01	0.19	0.07	0.04
	MI(-3)	0.35	-0.31	-0.42	-0.16	-0.39	0.35	0.04	-0.06	0.19	-0.04
BCP	MI	-0.12	0.13	-0.04	-0.27	-0.01	-0.12	0.01	-0.16	-0.39	-0.13
	MI(-1)	0.17	0.05	-0.03	0.01	-0.10	0.17	0.22	0.14	0.18	0.06
	MI(-2)	0.22	-0.32	-0.27	-0.12	-0.14	0.22	-0.10	-0.05	0.09	0.08
	MI(-3)	0.04	0.05	0.09	0.13	0.02	0.04	0.09	0.13	0.17	0.06

In the control variables, this study found that the bigger the company against the market performance (2.82), but is favorable for business performance (1.67) (said scale economy there are still exist, but the company size is too large, negative effects of doing business, such as operational efficiency is not recognized by the market), the property right proportion (debt) is also produce different results for two kinds of performance, market performance is positive significantly influence (0.17), while on the operating performance is a negative significant influence (0.03). The table shows that the interest expense suffered by enterprises with higher debt ratio cannot offset the effect of tax shield, while the market has a higher evaluation on the old listed companies with the length of listing time (the market performance is positive and significant effect (0.08), while the business performance is not significant.

5. Conclusions and Recommendations

The study primarily focuses on examining whether marketing has a deferred financial impact, and it highlights several key findings:

Company Size and Performance: The study suggests that in the context of Chinese non-financial companies, larger companies tend to have worse overall corporate performance. This observation might be related to the significant marketing expenditures of larger companies. It's important to note that correlation does not necessarily imply causation, but the research indicates a potential relationship worth further investigation.

Financial Marketing Struggles: The article points out that financial marketing is a challenging area for companies. It raises the question of whether investing in marketing activities has a noticeable effect on a company's bottom line, which is a critical concern because many companies may not fully appreciate the long-term impact of marketing.

Short-Term vs. Long-Term Focus: The text highlights that many companies tend to prioritize short-term results, and they might not immediately see the returns on their marketing investments. This contrasts with the preference for immediate returns on capital and profits, which is particularly common among Chinese and Asian companies.

Cautious Approach to Marketing Investment: Given the preference for immediate returns, the study suggests that companies, especially in Asia, may be cautious and selective in their re-investment in financial marketing. This could be due to a desire for a quicker payback period on marketing expenditures.

In essence, the research indicates that there might be a disconnect between the timing of marketing investments and the realization of their effects on a company's financial performance. Larger companies, in particular, may need to carefully evaluate the allocation of marketing resources to ensure they see a positive return on investment. This study emphasizes the importance of taking a long-term perspective and understanding the delayed or deferred effects of marketing efforts, which may not be immediately apparent but can be significant for a company's bottom line.

5.1. Management applications and implications

The study appears to offer valuable insights that can benefit senior management and decision-makers in Chinese companies. Here are the key takeaways that can have a positive impact on decision-making and corporate culture:

Diversification of Decision-Making: The research can provide senior management with alternative perspectives and approaches to decision-making. It encourages a shift away from a myopic focus on short-term performance and urges decision-makers to consider the long-term implications of marketing investments.

Breaking the Short-Term Focus: By highlighting the potential deferred financial effects of marketing, the study challenges the prevailing corporate culture in China, which tends to prioritize immediate performance metrics. It encourages companies to break away from the short-term mindset and consider the lasting impacts of their marketing strategies.

Incorporating Marketing in Financial Statements: The research emphasizes the importance of recognizing and accounting for the role of marketing in financial statements. It suggests that even though the effects of marketing may not be immediately evident on financial reports, they can manifest several years down the line. This insight underscores the significance of understanding and measuring the long-term financial impact of marketing investments.

Competitive Market Awareness: The study acknowledges the highly competitive nature of the Chinese market. In such a competitive landscape, companies are constantly seeking ways to generate profits quickly. The research, therefore, provides a counterpoint by urging a more thoughtful and measured approach to marketing investments.

In summary, the research has the potential to influence decision-making in Chinese companies by promoting a broader perspective on marketing investments. It encourages a focus on long-term financial effects, challenging the prevailing culture of short-term performance. Recognizing the deferred impact of marketing can be valuable for companies operating in a fiercely competitive market, as it allows for more strategic planning and a better understanding of the true financial implications of marketing strategies.

5.2. The limit

The main problem with our research is that it takes a lot of time to organize the data, and then we want to wait until the last three years to collect the data. We need to spend a lot of costs in manpower, material resources and expenses. It is suggested that follow-up researchers can design comparisons between different countries in terms of planning.

Data availability statement

Our data comes from a questionnaire survey designed by ourselves, which belongs to first-hand information.

Conflict of interest

Our article has no conflict of interest.

Ethical statement

Our research does not involve animals and humans' experiment, we simply investigate consumer behavior.

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