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## The Impact of the CEO's Financial Background on the Avoidance of Corporate Taxes

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### Abstract

In the context of the information economy, is the financial expertise and experience of CEOs of publicly traded businesses beneficial to corporate business operations? From a research standpoint, we looked at corporate tax evasion and discovered that companies led by CEOs with financial backgrounds had higher levels of tax avoidance. Moreover, in the market-oriented region, there would be a stronger correlation between a CEO's financial history and tax evasion. Additional investigation revealed that, in contrast to CEOs without a financial background evading taxes, CEOs with financial backgrounds evading taxes will benefit the company more financially. The data presented in this paper highlights the mild impact of the marketization process on the relationship between financial expertise and company tax avoidance, while also confirming the beneficial influence of a financial professional background on corporate tax avoidance.

**Keywords:** CEO, Financial background, corporate tax avoidance, evolvement of marketization, corporate performance

### 1. Introduction

A large amount of existing literature confirms that the professional background of corporate executives, such as R&D (Iii and Mueller, 2002; Yu Yehuda, 2018) or marketing, supply chain management (Keyence et al., 2010), financing (Custodia and Metzger, 2014), and enterprise market value management, etc., has a significant impact on many aspects of corporate operations. From a practical perspective, these studies confirm the diversity and usefulness of practical perspective, and also indirectly prove that the managerial market is efficient. Enterprises can select managers with different professional talents according to the characteristics of the individual as well as the industry. But these studies are the result of developed countries, not the countries with economies in transition like China. Compared with developed countries, the degree of marketization and legalization of countries with economies in transition, including China, is relatively low, and business activities of enterprises will be disrupted to some extent by non-marketization factors (Nee, V., 1992; Li & Zhou, 2005). Moreover, China itself has a relatively strong and long-term 'guanxi culture' (Park et al., 2001; Xin et al., 1996), and guanxi among people have a profound and extensive impact on corporate



activities. The above non-market factors may have a restraining effect on the exertion of the talents of enterprise managers, and thus show different test results from developed countries. Therefore, it is of great significance to examine the influence of managerial talents on the economic results of enterprises in countries with economies in transition.

Compared with business activities such as marketing, R&D, and financing, corporate tax avoidance activities are more affected by non-market factors because they are linked to government agencies. If the relevance of corporate managerial expertise to corporate tax avoidance can be found in transition countries, the importance of corporate managerial expertise will be further highlighted. Therefore, we select the research perspective of corporate tax avoidance to empirically test whether the professional talents of managers in transition countries have enough space to display their talents. In addition, China has a vast territory, and the degree of marketization and legalization of different provinces is not uniform (Wang and Fan, 2004; Fan et al., 2003). If the positive effect of professional ability on tax avoidance only occurs in areas with high marketization, not in areas with low marketization, then it will be strongly proved that the degree of marketization is indeed an important external condition for professional ability to play a role. Therefore, the differentiated degree of marketization in different regions of China provides us with a very good quasi-experimental setting which is helpful for us to test the moderate effect of the degree of marketization on the use of professional talents.

With the development of the economy, the economic matters involved by enterprises have become more and more complicated, so the taxes involved have also become more and more complicated. In addition, various tax types affect and cross each other, and tax avoidance and business operations affect each other, so corporate tax issues are more complex and important than ever. CEOs with a background in finance work are often proficient in the knowledge related to both accounting and tax, so they can make reasonable tax avoidance strategies in conjunction with business operations. Through an empirical test of Chinese company A-share listed companies from 2008 to 2014, we found that CEOs with financial backgrounds have a higher level of tax avoidance, and corporate tax avoidance effects of financial background CEOs play a better role in regions with a high degree of marketization.

The research contributions of this paper are as follows. First, in an environment like China where legalization is not yet perfect and guanxi or human relationships play an important role in socio-economic exchanges, whether professional competence can play a sufficiently important role has been questioned by everyone. We confirm that financial expertise has a positive effect on corporate tax avoidance, indicating that even in a professional field that is heavily influenced by political relationships or individual guanxi, corporate professionals still have enough space to play a role. Second, the marketization process has a positive moderate effect on the above “professional competence to tax avoidance” relationship, which shows that professional ability cannot be played without a healthy external institutional environment. Therefore, our marketization and legalization of construction still have a long way to go.

The rest of this article includes the following: In the second part we review the literature on executive characteristics and propose hypotheses 1 (Impact of CEO financial background on corporate tax avoidance) and hypothesis 2 (Moderating role of marketization process). The third part is research design, we give two hypothetical models and variables and indicate the source of the data. The fourth part is empirical results. We use OLS regression to give empirical results for two hypotheses. The fifth part is further research, and we test hypothesis 3 (the economic consequences of the effect of the CEO's financial background on tax avoidance). And the last part is the conclusion of the paper.



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## **2. Literature Review and Hypothesis**

### **2.1 Research on Executive Professional Background**

Research on executive professional background emphasizes early education and work experience of executives. In this regard, various disciplines have researched this, such as marketing, human resource management, finance, and accounting. Different disciplines emphasize different professional skills and backgrounds. For example, research in the field of technology science emphasizes the technical engineering work background of executives. Marketing strategy research focuses on executive marketing background. Corporate financial policy research highlights executive finance and financial work background. The research on the quality of accounting information focuses on the professional education background and work experience of executives in the field of accounting. For example, Song (1982) used empirical data from 1965 to 1980 to conduct empirical research on 53 diversified and growing American companies. The results show that the background and previous experience of the current CEO of each company are closely related to the company's diversification strategy. Keyence et al. (2010) focused on this type of company in supply chain management and found that CEOs with a background in operations management tend to achieve better performance. Barker, et al. (2002) found that the companies whose CEOs are young, have more wealth to invest in company stocks or have professional experience in marketing, engineering, or R&D have higher R&D expenditures. Custodia and Metzger's (2014) research found that companies with a financial professional background hold less cash, more debt, and participate in more stock repurchases. CEOs with a financial professional background are more financially complex, they manage financial policies more actively, and their company investments are less sensitive to cash flows.

Yu et al. (2018) manually collected the inventor experience data of the chairmen and CEOs of listed companies and found that inventor executives have a significant positive role in promoting R&D investment, innovation output, and innovation efficiency.

The above research elaborated on the positive effects of a company's managerial expertise or professional background on the company's production and operation results from various aspects, such as management, R&D, and finance. Following the above research, we believe that corporate tax avoidance will also be affected by the manager's related expertise.

### **2.2 Executive Accounting Background**

Cullinan and Roush (2011) found that after the Sarbanes-Oxley Act, companies prefer to appoint a CEO with an accounting or financial background to enhance the quality of financial reporting. Kelkar and Khan (2016) used US-listed companies as a research sample from 2004 to 2013 and found that the companies with CEOs with financial expertise backgrounds paid lower audit fees. Due to the CEO's accounting professional background, the risk of auditor participation is reduced, which increases the likelihood that auditors will charge lower fees to these companies.

Sun et al. (2019) found that when CFOs are young, masculine, or have a low educational background, companies are more likely to issue fraudulent financial reports. Matsunaga and Wang (2013) observed such a unique sample of the company's CEO succession and found that if the former CFO served as the current CEO, the company would bring about some changes in financial characteristics, such as the increase in analyst coverage and the increased degree of divergence in analyst forecasts, and an increase in the absolute value of discretionary accrual.

Jiang and Huang (2013) used a sample of CEO changes in listed companies in China and found that CEOs with a financial background have an important and positive influence on the company's capital



structure decision-making. They found that when the secretary of the board of directors has financial experience, the sensitivity of the investment cash flow of his company is lower, that is, the level of financing constraints is lower.

We take the accounting professional background of corporate executives as a measure of financial expertise, and believe that the early professional background of executives has an impact on corporate tax avoidance for the follow two reasons. First, corporate tax avoidance is a very technically demanding job that requires a relevant professional background as a basis. Corporate tax avoidance, especially corporate income tax avoidance, requires not only familiarity with tax laws but also a good understanding of corporate accounting. And because tax avoidance is often closely linked to the production and operation of an enterprise, sometimes simply reducing the tax burden is not necessarily beneficial to the overall strategy of the enterprise's production and operation. Therefore, tax avoidance of enterprises also needs to understand the overall operation of the enterprise, as well as investment and financing, and to finally assess the pros and cons. Second, people with different professional backgrounds have different professional thinking patterns. People who have been engaged in marketing for a long time always figure out how to increase market share, and those who have been engaged in taxation for a long time will think about how to reduce the tax burden. Executives who have worked in a previous position for a long time will form a stable professional thinking mode. Even if they are promoted to a higher management position in the future, they will use previous work experience and thinking methods to deal with problems at work.

Deering (2010) believes that the CEO of a listed company can determine the tax avoidance decision of the company by the way of “tone at the top”. The CEO can adjust the relative focus of the work of various functional departments of the enterprise and adjust corporate resources for hiring tax consultants. In this way, the CEO will have a very important impact on corporate tax avoidance. The previous work experience in finance and accounting will help the CEO to accumulate a good tax avoidance professional foundation and form related professional thinking habits. Therefore, we expect that the financial and accounting work experience will help the CEO of this professional background to actively avoid tax. Because tax avoidance is a financial decision, and because corporate tax avoidance is often closely linked to other aspects of the company's operations, it needs to be considered from the perspective of the company as a whole, so the CEO of the company should be responsible for this. Based on the above analysis, we propose the following assumptions:

**H<sub>1</sub>:** CEOs with a professional background in finance and accounting are good for companies to actively avoid tax.

### 2.3 The Impact of China's Non-marketization Factors on Corporate Tax Avoidance

In the initial design of the tax system, a tax system with an "excessively high nominal tax rate" was formulated. In this way, even in the case of low collection rates (Number of companies actually taxed divided by number of companies that should be taxed), it can ensure the expected tax revenue of the government. This design gives the tax collection authority great tax discretion. In practice, due to the tax competition between regions, different regions carry out "tax benefits management" for specific enterprises, such as misuse of tax benefits, flexible collection and management, and replacement of extra-budgetary income. This "tax benefits management" gives the tax authorities a great deal of space for the rules under the table.

We have found in several documents and leaders' speeches of the State Administration of Taxation that the government has known that “guanxi tax” exists in the collection and management of grass-



roots taxes, and the government has repeatedly called for the "micro-corruption" problem in grassroots taxation to be eliminated, and to promote fair taxation<sup>1</sup>.

In terms of academic literature, believe that the tax collectors have too much power in China's current tax system, the rent-seeking space in the system still exists widely, and the "guanxi tax" between tax collectors and taxpayers is prominent. Tian and Fan(2018) quoted a 2012 article from New Century Weekly Wang Changwon, who argue that the tax bureau is the government department most unwilling to offend, and the tax collector is the tax bureau official with whom we should maintain the relationship.

In addition to guanxi, many kinds of literature confirm political connections (Adhikari et al., 2006; Wu et al., 2012), political identities (Li et al., 2013), and local government tax competition and other non-market factors affect the tax avoidance of enterprises.

Although corporate tax avoidance is affected by the above non-marketization factors such as guanxi or political ties, China's marketization has been progressing. The process of marketization is a process of private property rights protection and market rules respect and substantial use. In the process, the government should abandon those administrative interventions and rely more on market rules. From the perspective of time, the marketization and legalization of the Chinese economy is a process of gradual development and improvement from scratch. From a spatial perspective, marketization and legalization have regional differences. The marketization and legalization construction in the southeast coastal areas is relatively mature, while the marketization and legalization concepts in the central and western regions are relatively indifferent. In the application of rules, regions with a high degree of marketization are more based on the rules on the table, while regions with a lower degree of marketization have more rules under the table.

CEOs with a professional background in accounting and finance have a better grasp of tax professional knowledge, a clearer understanding of tax regulations, and a more sensitive professional awareness of improving corporate value through corporate tax avoidance. Therefore, their knowledge and capabilities are more useful in areas with a high degree of marketization and a better legal system. In areas where marketization is relatively low, due to the use of more under-the-table tax rules and mastery of tax knowledge which is far less direct and effective than non-professional factors, the advantage of corporate tax professionals being more familiar with the rules on the table is not significant. Based on the above analysis, we propose the following assumptions:

**H<sub>2</sub>:** The positive relationship between tax avoidance and CEOs with professional backgrounds in finance and accounting is more significant in regions with a higher degree of marketization.

### 3. Research Design

#### 3.1 Explanatory Variable

The database of "TMT figure of Chinese Listed Companies" in CISMAR is about the professional background information of listed company executives, including the following categories: "1 = production, 2 = development, 3 = design, 4 = human resources, 5 = management, 6 = market, 7 =

<sup>1</sup>In 2005, the State Administration of Taxation's "Opinions on Further Regulating and Improving the Management of Individual Tax Collection" believed that there were "guanxi taxes" in the assessment of individual industrial and commercial households. In 2016, the General Office of the State Administration of Taxation's document "The State Administration of Taxation's authority to regulate tax administrative penalties" called for the establishment of strict rules for the exercise of power, effectively reducing the "guanxi tax", regulating tax collectors, promoting fair law enforcement, and creating a good Tax environment for the development of society. On February 23, 2018, a speech by the State Administration of Taxation Party Secretary, Director, and leader of the inspection work leading group Wang Jun, "Unswervingly Deepen the Political Inspection" was published on the China Discipline Inspection and Supervision News. And in his speech, Wang said that "because the tax system has many points, long lines, and broad areas, and more than 90% of tax officials are at the grassroots level and directly contact the taxpayer, we should severely deal with corruption issues that occur near the masses, such as "micro-corruption" at the grassroots level. And grass-roots tax cadres will be severely punished for eating, taking, carding, demanding, arbitrarily taxing, choosing taxation, emotional taxation, collecting 'excessive taxation', and relationship tax."



financial, 8 = accounting, 9 = law”. An executive may have a single professional background or multiple professional backgrounds. We set the dummy variable ACC. The value is 1 when the company CEO has a financial or financial professional background, otherwise, it is 0.

### 3.2 Explained Variable

We use the following three methods to measure the degree of tax avoidance of enterprises. First, the financial effective tax rate (BETR) is equal to the income tax expense divided by the total pre-tax profit and then minus the corporate nominal tax rate. Second, book-tax differences (BTD) is equal to accounting profit before tax minus taxable income and divided by total assets at the end of the year t. The taxable income above is equal to the income tax expense plus the increase in deferred income tax assets, plus the decrease in deferred income tax liabilities, and then divided by the nominal income tax rate. Third, because BTD is related to the total accrual of the enterprise, the direct adoption of BTD will be questioned because it is affected by the total accrual and generates noise. Therefore, following the approach of Desai et al. (2006), we remove the total accrued impact based on BTD and get the modified BTD (DDBTD). Specifically, after grouping all samples by year and industry, we perform regression according to Model (1) to calculate the fitted values of residuals. And this fitted value is the modified book-tax difference (DDBTD).

$$BTD_{i,t} = \alpha_0 + \alpha_1 TA_{i,t} + \varepsilon \dots \dots \dots (1)$$

The BTD in the above model is the book-tax difference of the second method mentioned above. TA is total accrual, which is equal to the difference between net income and net cash flows from operating activities, and then divided by total assets.

### 3.3 Control Variables

Our control variables include CEO personal characteristic variables (CEO characteristic), firm fixed characteristic variables (firm\_fix), corporate governance characteristic variables (firm\_government), and company financial characteristic variables (firm\_financial).

CEO personal characteristics include CEO age (AGE) and CEO gender (GENDER). The firm fixed characteristic variable is whether the enterprise is a state-owned enterprise (SOE). Corporate governance characteristic variables include whether the chairman and CEO are dual (DUAL), the shareholding ratio of the largest shareholder (FIRST), and the proportion of independent directors (OD). The company's financial characteristic variables include the size of the company (SIZE), financial leverage (LEV), degree of development (MTB), and whether it is losing money (LOSS).

### 3.4 Model

To test hypothesis 1, we set the following model (2):

$$TAXV_{i,t} = \beta_0 + \beta_1 ACC + \sum CEO_{characteristic} + \sum firm\_fix + \sum firm\_government + \sum firm\_financial + \sum \lambda_i YEAR + \sum \eta_i IND + \varepsilon \dots \dots \dots (2)$$

The explanatory variable ACC is the CEO accounting professional background. TAXV is tax avoidance of enterprises, which is measured by three methods: BETR, BTD, and DDBTD. It should be noted that BETR is a financially effective tax rate. The lower the value, the higher the tax avoidance of the company. While BTD and DDBTD are the differences in book and tax. A larger value indicates a larger total accounting net income and a smaller taxable income, which indicates a higher degree of corporate tax avoidance. So when measuring tax avoidance in two different ways, the expected sign of the coefficient of ACC in the model is different. The former is expected to be negative, and the latter is expected to be positive. All variables and definitions are shown in Table 1 below.



Table 1: The Definition of Variables

Variables	definition
BETR	Income tax expense divided by total profit before tax, then minus corporate nominal tax rate equal to accounting profit before tax minus taxable income, and divided by total assets at the end of the year t. The taxable income above is equal to the income tax expense plus the increase in deferred income tax assets, plus the decrease in deferred income tax liabilities, and then divided by the nominal income tax rate.
BTD	after grouping all samples by year and industry, we perform regression according to Model (1) to calculate the fitted values of residuals. And this fitted value is the modified book-tax difference (DDBTD).
DDBTD	$BTD_{i,t} = \alpha_0 + \alpha_1 TA_{i,t} + \varepsilon \dots \dots \dots (1)$
INDEX	China Marketization Index (2016 Edition) by Wang et al.(2016)
ACC	If the CEO has a financial or financial professional background, the value is 1; otherwise, it is 0.
AGE	Age of CEO
GENDER	Gender of CEO
SOE	If the enterprise is a state-owned enterprise, the value is 1, otherwise it is 0
DUAL	If the chairman and CEO are dual, the value is 1. Otherwise, it is 0.
FIRST	the shareholding ratio of the largest shareholder
OD	the proportion of independent directors
SIZE	Natural logarithm of total assets at the end of year t
LEV	Financial leverage which is equal to total liabilities divided by total assets
MTB	Degree of development, equal to the ratio of market value to book value
INTANG	Intangible assets at the end of the year t divided by total assets at the end of the year t
SGA	Sum of selling expenses, management expenses and financial expenses divided by total assets at the end of the year t.
CFO	Net cash flow from operations divided by total assets at the end of the year t
LOSS	The value is 1 if the net income is negative, 0 otherwise
YEAR	Dummy variables of year
IND	Dummy variables of industry

#### 4. Samples and Data

Our marketization index is from China Marketization Index (2016 Edition) by Wang et al. (2017). Except for the marketization index, other data are coming from the CISMAR database. Specifically, CEO financial data are from the “figure characteristics” sub-database, and our control variables are from the Chinese listed companies research” sub-database.

CISMAR only provides data on the professional background of executives of listed companies after 2008. And the Chinese marketization index data we obtained was from 2007 to 2014. Therefore, this article takes China A-share listed companies from 2008 to 2014 as an initial sample. Based on the initial sample, we exclude data from financial listed companies and missing data.

In addition, considering that we use the actual tax rate minus the nominal tax rate as a proxy variable to measure the degree of tax avoidance of the enterprise, we exclude data with a BETR greater than 100% or less than -33%. Because the range of the actual tax rate is "0% to 100%" and the range of the nominal tax rate is "0% to 33%", the theoretical range of the BETR is "-33% to 100% ". In the end, we got 2213 firms and 9606 firm-year data.



4.1 Descriptive statistics

Panel A in Table 2 is a descriptive statistical result of full samples. It can be seen from Table 3 that the average ETR is 9%, and the average BTD after company size smoothing is 0.02. The average age of the CEO of the sample company is 48, of which 94% are male. 14% of the sample companies lost money, and SOEs accounted for 45% of the total sample. The average asset size of the sample company is 21.60, the average asset-liability ratio is 38%, and the average ROA is 4%.

Panel B in Table 2 is a comparison between CEOs with a financial professional background and those without a financial professional background. As can be seen from Table 2, the ETR of the listed company where the CEO with a financial background is located is lower than the listed company with a non-financial CEO. The mean difference t-test and the median difference z-test were both significant at the 1% level. The above results preliminarily prove that the tax avoidance of CEOs of listed companies with financial background is higher. In terms of control variable results, we can see that compared with the non-financial professional background sample data, the financial background sample has a younger CEO and a larger proportion of women. And financial background sample CEO's listed company is smaller and has worse performance.

Table 2 : Descriptive Statistics

Panel A : full sample

variable	sample	mean	sd	25per	madian	75per
BETR	9606	-0.08	0.12	-0.16	-0.05	-0.01
BTD	4951	0.01	0.06	-0.01	0.01	0.03
DDBTD	4951	-0.11	0.15	-0.18	-0.12	-0.04
ACC	9606	0.15	0.36	0.00	0.00	0.00
INDEX	9606	7.41	1.65	6.19	7.62	8.69
AGE	9606	48.24	6.25	44.00	48.00	52.00
GENDER	9606	0.94	0.23	1.00	1.00	1.00
SOE	9606	0.45	0.50	0.00	0.00	1.00
DUAL	9606	1.77	0.42	2.00	2.00	2.00
FIRST	9606	36.14	15.18	23.98	34.41	46.95
OD	9606	0.37	0.05	0.33	0.33	0.40
SIZE	9606	21.61	1.16	20.82	21.45	22.21
LEV	9606	0.38	0.21	0.21	0.36	0.53
MTB	9606	0.00	0.00	0.00	0.00	0.01
ROA	9606	0.04	0.06	0.01	0.04	0.07
PPE	9606	0.15	0.15	0.04	0.11	0.22
INTANG	9606	0.03	0.04	0.00	0.02	0.03
SGA	9606	0.07	0.05	0.03	0.05	0.08
CFO	9606	0.03	0.08	-0.01	0.03	0.08
LOSS	9606	0.12	0.32	0.00	0.00	0.00





Panel B : sub-sample

variable	Financial ( 1 )			Non-financial ( 0 )			Mean difference	Madian Difference
	sample	mean	madian	sample	mean	madian	( 0 ) - ( 1 ) t值	( 0 ) - ( 1 ) z值
BETR	8163	-0.08	-0.05	1443	-0.10	-0.08	6.7	7.15
BTD	4110	0.01	0.01	841	0.02	0.01	-3.39	-3.21
DDBTD	4110	-0.11	-0.12	841	-0.10	-0.11	-2.3	-2.18
INDEX	8163	7.40	7.62	1443	7.46	7.73	-1.21	-1.89
AGE	8163	48.40	48.00	1443	47.34	47.00	5.96	6.19
GENDER	8163	0.95	1.00	1443	0.91	1.00	5.8	5.8
SOE	8163	0.45	0.00	1443	0.48	0.00	-1.94	-1.94
DUAL	8163	1.76	2.00	1443	1.82	2.00	-4.53	-4.53
FIRST	8163	36.10	34.38	1443	36.33	34.52	-0.52	-0.38
OD	8163	0.37	0.33	1443	0.37	0.33	-3.03	-3.11
SIZE	8163	21.60	21.44	1443	21.67	21.53	-2.17	-2.2
LEV	8163	0.37	0.36	1443	0.38	0.37	-1.31	-1.11
MTB	8163	0.00	0.00	1443	0.00	0.00	-2.34	1.24
ROA	8163	0.04	0.04	1443	0.04	0.03	2.22	2.91
PPE	8163	0.16	0.12	1443	0.12	0.08	9.32	10.13
INTANG	8163	0.03	0.02	1443	0.03	0.01	0.2	5.83
SGA	8163	0.07	0.06	1443	0.06	0.05	5.82	7.35
CFO	8163	0.03	0.03	1443	0.03	0.03	2.14	2.41
LOSS	8163	0.12	0.00	1443	0.13	0.00	-1.26	-1.26

### 5. The Impact of the CEO's Financial Background on Corporate Tax Avoidance

Table3 reports the results of the multivariate regression result of the effect of the CEO's financial career background on corporate tax avoidance. As far as the explained variables, we use BETR (first column), BTD (second column), and DDBTD (third column) as the proxy of tax avoidance. In the BETR model, if the CEO is from a non-financial background to a financial background, the BETR of the company will fall by 0.01. Because BETR is the result of the actual tax rate minus the nominal tax rate, the average level of BETR is -0.078, which means that on average, the actual tax rate of all enterprises is 7.8% lower than the nominal tax rate. If the corporate CEO has a financial background, the average tax rate can be reduced by another 1% on average, so the impact of the financial professional background on corporate tax avoidance is very significant. In terms of controlling variables, SOE is more tax-avoidant, companies with high levels of debt are more tax-avoidant, companies with better performance are more tax-avoidant, and companies with abundant cash flows are relatively less likely to avoid tax.



**Table3 : The Effect of the CEO’s Financial Background on Tax Avoidance ( H<sub>1</sub> )**

	BETR		BTD		DDBTD	
	Coef.	T value	Coef.	T value	Coef.	T value
ACC	-0.01*	-1.95	0.003*	1.83	0.00	1.31
AGE	0.00***	-3.51	0.00	0.25	0.00	-0.67
GENDER	0.01	1.20	0.00	0.01	0.00	0.09
SOE	-0.02***	-8.17	0.01***	4.50	0.01***	3.91
DUAL	-0.01***	-2.80	0.002	1.35	0.00	1.09
FIRST	0.00	0.79	0.00	-0.96	0.00	-1.03
OD	-0.04*	-1.84	0.004	0.28	0.00	-0.08
SIZE	0.00*	-1.97	-0.001	-0.91	0.00	0.75
LEV	-0.01	-1.51	0.02***	5.25	0.01*	1.86
MTB	-3.35***	-9.79	-0.42***	-2.13	-0.01	-0.04
ROA	-0.04*	-1.62	0.70***	44.86	1.94*	101.40
PPE	0.10***	10.78	-0.02***	-2.93	-0.02***	-2.57
INTANG	0.09***	3.27	-0.05***	-2.81	-0.06***	-2.55
SGA	0.25***	10.22	-0.18***	-12.94	-0.18***	-10.30
CFO	0.13***	8.36	-0.07***	-8.31	-1.37***	-129.30
LOSS	-0.05***	-11.72	-0.01***	-4.74	-0.02***	-5.40
IND	yes		yes		yes	
YEAR	yes		yes		yes	
obs	9606		4951		4951	
R <sup>2</sup>	0.14		0.47		0.87	
F	42		118		889	

### 5.1 Variations in Different Methods

The relationship between a CEO's financial professional background and corporate tax avoidance may be endogenous. The CEO's financial professional background may help companies avoid tax, and companies with a tax avoidance intention may also preferentially choose someone with a financial professional background as the corporate CEO. To eliminate the interference of endogenous problems on the research conclusions, we adopt the difference in difference method. Specifically, we select a sample of CEO turnover, with a non-financial professional background CEO converted to a financial professional background CEO as the treatment group, and other situations (financial to financial, non-financial to non-financial, and financial to non-financial) as the control group. TREAT is a dummy variable. It is set to 1 when in the treatment group, otherwise it is 0.

We set the variable POST which is equal to 1 if in the year after CEO turnover, and equal to 0 if it is before CEO turnover and we delete the sample in year of CEO turnover. If the time interval before and after the turnover year is too long, it may cause too much unknown noise to interfere with the conclusion, so we only keep data for up to 3 years before and after the turnover year. We set the



model as follows:

$$TAXV_{i,t} = \beta_0 + \beta_1 TREAT + \beta_2 POST + \beta_3 TREAT * POST + \sum \varphi_i controls + \sum \lambda_i YEAR + \sum \eta_i IND + \varepsilon \dots \dots \dots (3)$$

Table 4 reports the regression results of the CEO turnover sample under the DID method. Since we cannot get enough samples, we have no way to get the results of the DDBTD model. The results show that the coefficient of the interaction term in BETR model is negative and significant at the 5% level. In the BTM model, the coefficient of the interaction term is positive, and it is significant at the level of 1%.

In the BETR model, the BETR of the control group, decreased by 0.037 after the CEO turnover, but not significantly. However, the BETR of the treatment group decreased by 0.092 after the CEO turnover. In the BTM model, there was almost no significant change in BTM in the control group, whereas the BTM of the treatment group increased by 0.026 after the CEO turnover.

The above results show that compared with other types of CEO turnover, the turnover from a non-financial background CEO to a financial background CEO will result in a higher level of tax avoidance, which supports Hypothesis 1.

**Table 4 : The Effect of the CEO’s Financial Background on Tax Avoidance ( DID )**

variables	BETR		BTM	
	Coef.	T value	Coef.	T value
TREAT	0.05***	2.05	-0.02***	-2.36
POST	-0.04	-2.54	0.00	-0.01
TREAT*POST	-0.06**	-1.81	0.03***	2.52
intercept	-0.06	-0.48	-0.04	-1.15
controls	yes		yes	
IND	yes		yes	
YEAR	yes		yes	
obs	728		420	
R <sup>2</sup>	0.1573		0.4601	
F	9.59		15	

### 5.2 Moderating Role of Marketization Process

In order to test the moderating effect of the marketization process on tax avoidance by CEO financial background (Assumption 2), we use marketization index data as a moderator to add to the above model (3), and obtain the following model (4).

$$TAXV_{i,t} = \beta_0 + \beta_1 ACC + \beta_2 INDEX + \beta_3 ACC * INDEX + \beta_n controls + \sum \lambda_i YEAR + \sum \eta_i IND + \varepsilon \dots \dots \dots (4)$$

The above model (4) is the same as model (3), except that INDEX and ACC \* INDEX items are added. We pay attention to β3 in the model (4), and predict that the interaction term coefficient of the BETR model is significantly negative, and the interaction term coefficient of the BTM and DDBTD models is significantly positive.

Table 5 reports the results of testing Hypothesis 2. The results show that, regardless of the BETR, BTM, or DDBTD model, the coefficients of the interaction terms are significant. This result proves



that Hypothesis 2 holds, that is, in regions with a high degree of marketization, the tax avoidance effect of CEOs with financial background is more obvious.

Table 5 : The Moderate Effect of the Marketization Process ( H<sub>2</sub> )

variables	TAXAV=BETR		TAXAV=BTB		TAXAV=DDBTD	
	Coef.	T value	Coef.	T value	Coef.	T value
ACC	0.02	1.35	-0.01	-1.49	-0.02	-1.61
INDEX	0.00	-0.17	0.00	-0.55	0.00	-0.71
ACC*INDEX	<b>-0.00*</b>	<b>-1.85</b>	<b>0.00*</b>	<b>1.92</b>	<b>0.00*</b>	<b>1.93</b>
controls	yes		yes		yes	
IND	yes		yes		yes	
YEAR	yes		yes		yes	
Obs.	9606		4951		4951	
R2	0.14		0.47		0.87	
F	40		111		843	

Note: \*, \*\*, and \*\*\* indicate significant levels at 10%, 5%, and 1%, respectively.

### 5.3 Future Research

The impact of corporate tax avoidance on corporate performance is two-sided. On the one hand, corporate tax avoidance reduces cash flow expenditures and increases profit after tax. This is the positive effect of tax avoidance. On the other hand, aggressive tax avoidance may attract additional attention from tax authorities and may pay additional tax fines (Hanlon, et al., 2010). In addition, there are agency problems between managers and shareholders. Managers have the motivation to use corporate tax avoidance as an excuse to achieve their hidden self-interest (Desai and Dharmapala, 2009, 2006). Shackelford et al. (2001) believe that corporate internal control and ownership structure are important factors influencing corporate tax avoidance. Chen et al. (2010) found that American family-owned companies gave up the positive benefits that positive tax avoidance could bring to companies because they were worried about serious agency problems. These are the negative results of tax avoidance. Because corporate tax avoidance has both positive and negative effects on performance, we hope to examine whether the tax avoidance effect of the financial background CEO can improve corporate performance.

We expect that compared with the financial background CEO, the financial background CEO's tax avoidance is more conducive to the improvement of corporate performance. First of all, CEOs with a financial background can achieve the effect of active tax avoidance according to their professional knowledge and professional awareness. Financial background knowledge tells them that they should avoid taxation from the comprehensive results of business performance. Sometimes it is good for the company to avoid tax, but it may not be good for the final business results of the company. For example, paying too much attention to the tax benefits that companies can get may hurt their actual production and operation activities. Although the taxable income is not the same as the net income of the enterprise, it is also logically related. Reducing the taxable income and pursuing tax avoidance may reduce the net income of the enterprise at the same time. The balance of these interests and the grasp of scale undoubtedly need to be supported by a very skilled and experienced financial knowledge background. Second, CEOs with a financial background may have proficient experience in dealing with tax authorities, and they know where the risk boundary of taxation is. As a result, they



are more likely to avoid incurring additional tax penalties than non-financial CEOs. Finally, CEOs with a financial background, because they are familiar with tax law and financial knowledge, can use a larger proportion of on-table way to avoid tax than under-table way. The relatively more use of on-table way to avoid tax can relatively ensure the standardization and legalization of corporate financial environment, thereby reducing the space for corporate agency problems and reducing tax avoidance costs due to agency problems. Based on the above considerations, we expect that compared with non-financial background CEOs, CEOs with a financial background who actively avoid tax can lead to better corporate performance. To test the above effects, we propose model (5):

$$ROA = \alpha_0 + \alpha_1 TAXAV + \alpha_2 ACC + \alpha_3 ACC * TAXAV + \sum controls + \sum IND + \sum YEAR + \varepsilon \dots \dots \dots (5)$$

Here TAXAV is represented by BETR, BTB and DDBTD, respectively. And we use the CEO age (AGE), CEO gender (GENDER), dual roles (DUAL), the largest shareholder shareholding ratio (FIRST), the proportion of independent directors (OD), the size of the company (SIZE), financial leverage (LEV), cash flow (CFO), and whether it is a SOE or not (SOE) as the control variables of the model. The regression results of corporate performance are shown in Table 6.

As shown in Table 6, the interaction coefficients of ACC and TAXAV in the three models are significant at the levels of 10%, 1%, and 1%, respectively. The interaction coefficient of the ETR model is significantly negative. The coefficients of the interaction terms in the BTB and DDBTD models are significantly positive. These results show that compared with non-financial CEO tax avoidance, CEOs with a financial background can bring better financial performance to companies.

Table 6 : The Financial Performance by the CEO's with Financial Background ( H<sub>3</sub> )

ROA	BETR		BTB		DDBTD	
	Coef.	T value	Coef.	T value	Coef.	T value
TAXAV	0.02***	3.45	0.51***	47.78	0.38***	114.30
ACC	0.00*	-1.73	0.00	-1.39	0.00*	1.66
ACC *TAXAV	<b>-0.02*</b>	<b>-1.78</b>	<b>0.07***</b>	<b>2.83</b>	<b>0.03***</b>	<b>5.00</b>
controls	yes		yes		yes	
IND	yes		yes		yes	
YEAR	yes		yes		yes	
Obs.	9606		4951		4951	
R <sup>2</sup>	0.47		0.14		0.87	
F	257		24		996	

Note: \*, \*\*, and \*\*\* indicate significant levels at 10%, 5%, and 1%, respectively.

### 6. Conclusion

First of all, this article uses the firm-year data of China's A-share listed companies from 2008 to 2014 as a research sample. The study finds that compared with non-financial professional CEOs, companies with financial professional CEOs are more active in tax avoidance. In order to solve the endogenous problem of the model, we selected the CEO turnover data and adopted the DID method. The above conclusions are still hold. This conclusion proves that the financial knowledge and experience of executives can play a role in business management. Secondly, we used the marketization index 2008-2014 data to test whether the marketization process has an impact on the tax avoidance effect of the CEO with a financial background, and found that the tax avoidance effect of the CEO's financial



background is more significant in regions with a higher degree of marketization. These results reveal that if the financial knowledge and experience of executives are to be fully effective, they need to have appropriate basic institutional conditions. Finally, we examined the impact of tax avoidance behavior of CEOs with a financial background on corporate performance. As a result, we found that tax avoidance for CEOs with a financial background can generate better corporate performance than tax avoidance for CEOs with a non-financial background.

In the context of the knowledge economy, our research has some implications for the appointment and selection of executives of listed companies. First, knowledge is valuable. Listed companies, by appointing CEOs with financial expertise and experience, can leverage these CEOs' expertise and create value for the company. Second, we also need institutional conditions in order for talents to make the most of their talents. Our research is also meaningful for macroeconomic operations and development. From a macro perspective, we must speed up the process of marketization and build a good judicial environment so as to ensure the exertion of individual professional skills at the micro level.

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