Study of the Impact of TMT Financial Background on Corporate Accounting Robustness

Wenting Zhang

School of Finance and Accounting, Fuzhou University of International Studies and Trade, Fuzhou, China

Abstract

As a key indicator of corporate accounting, accounting robustness determines the accuracy and reliability of the quality of corporate accounting information, and also affects the operational efficiency and core competitiveness of enterprises. This paper takes the data of Chinese listed companies from 2008 to 2020 as a research sample to empirically examine the relationship between executive financial background and corporate accounting robustness. It is found that the financial background of executives can significantly improve corporate accounting robustness, i.e., the accounting robustness of executive firms with financial background is significantly higher than that of executive firms without financial background. Based on the findings of the study, the following suggestions are made: pay attention to the background characteristics of the executive team, strengthen the executives' own quality, and reasonably select matching executives.

Keywords

Listed Companies; Financial Background of Executives; Accounting Robustness.

1. Introduction

Since Hambrick (1984) put forward the "top echelon theory", scholars have begun to study the related problems from the perspective of corporate managers' characteristics. Managers' management style and decision-making will be changed by their own traits, which will affect the behaviour and performance of their enterprises. From this point of view, top managers with a good background in the financial industry have the financial knowledge, background and scarce human resources brought by their own education, which can enhance the company's competitive advantage from the inside out. It is for this reason that more and more companies are hiring people with a good financial background to work on the future strategic development of the company. Accounting robustness, as a key indicator when a company handles accounting information, can bring more effective and real financial signals to the company, thus ensuring the investment benefits for investors.

At present, academics are more in the study of governance structure, the nature of equity structure, the quality of internal control, surplus management, profitability and other corporate research series on the impact of accounting robustness, and then or to elaborate on the background characteristics of the directors and the personal characteristics of the audit committee members, and few have initiated the study from the field of financial background of executives. So, do the background characteristics of the financial industry of corporate executives also have a favourable impact on the accounting robustness of the firm? This is one of the important issues related to the healthy growth of enterprises. This paper not only enriches the theoretical results of accounting robustness, but also has certain practical guidance significance for enterprise management.

2. Literature Review and Research Assumptions

2.1. Literature Review

Accounting robustness also refers to the principle of accounting robustness, which requires corporate accountants to recognise losses more accurately and in a timely manner (Basu, 1997), and to enhance corporate accounting robustness to protect the rights of stakeholders and effectively retain corporate value (Donovan et al., 2015).Watts (2003) discusses the impacts of accounting robustness on business operations and management from the perspective of contractual, litigation, tax and regulatory aspects. factors affecting the emergence of accounting robustness; Goh et al. (2011) argued that the higher the quality of internal controls, the higher the accounting robustness; Khurana et al. (2015) showed that corporate accounting robustness tends to decrease when the level of short-term debt increases; Cory (2015) analysed that when the related bad debt provision is publicly interpreted, accounting robustness will be reduced due to the decrease in the firm's surplus operating items. In recent years, more scholars have paid attention to the impact of corporate executive characteristics on accounting robustness.Bushman (2006) and other scholars' conclusions show that executive shareholding is significantly negatively correlated with accounting robustness; Dana (2019)found that TMT background homogeneity and long-shared working experience are each distinctly related to a higher likelihood of restatements; Sandra (2023) found that there is a significant positive correlation between female directors and accounting conservatism; and TMT nationality and gender diversity have a positive impact on accounting quality has a positive impact (Schumann et al., 2023).

2.2. Research Hypotheses

Managers' personal characteristics and personal experiences create their unique background characteristics, and the competencies demonstrated by these background characteristics can be reflected in the business decisions of the firm. Therefore, executives with financial backgrounds are theoretically exposed to more and a wider range of work experiences than ordinary executives. Based on the accumulation of existing work experience, such executives can demonstrate a stronger sense of prudence in their work, which coincides with the prudent attitude required by accounting robustness.

Specifically, this paper argues that the impact of the financial background of executives on the robustness of corporate accounting is mainly reflected in the following aspects: first, executives with a financial background have a lot of work experience in the field before entering the enterprise, and this work experience has accumulated a wealth of financial knowledge, financial knowledge and strong judgement, which can play a good supervisory role in a series of work for the financial staff. It also makes the financial operation more standardised and the recognition and measurement of accounting elements more appropriate, which in turn improves accounting robustness. Secondly, people who have specialised skills in a particular area will reduce the cost of obtaining information in that area. Executives with a financial background, whether in the acquisition of information or in the capture of opportunities, have the corresponding advantages, can help enterprises to prioritise the selection of investment projects can also be withdrawn in a timely manner, reducing the enterprise's investment risk, and help to improve the quality of corporate accounting information. Finally, when the management of the enterprise lacks management, the accounting staff's work attitude and professional quality is likely to be low, and then make a wrong estimate of the business. For the various costs and gains and losses can not be recognised in a timely manner, resulting in calculation bias, reducing the robustness of accounting. The complexity of the financial investment environment creates a higher cognitive base and values for senior management. Unlike other top managers, executives with this background are able to detect and intervene in

low-quality financial reports made by financial staff in a timely manner, reducing the incidence of financial fraud and maintaining a high level of accounting robustness.

In summary, executive financial background may have a good impact on the accounting information disclosure and accounting information quality of enterprises and enhance the accounting robustness of enterprises. Based on this, this paper proposes the following hypotheses:

H1: Executive financial background of listed companies can improve the accounting robustness of enterprises.

3. Research Design

3.1. Model Construction

According to the above relevant theoretical analysis, this paper constructs the following regression model for hypothesis testing:

$$AC_{it} = \alpha_0 + \alpha_1 Frate_{it} + \beta_i \sum Controls_{it} + \varepsilon_{it}$$

In the model, i represents the company, t represents the year, AC is the explanatory variable "accounting soundness of listed company i in year t", Frate is the core explanatory variable "proportion of executives with financial background", Controls is a series of control variables, α_0 is the constant term, α_1, β_i are the coefficients to be estimated, ε is the random disturbance term. α_0 is the constant term, α_1 and β_i are the coefficients to be estimated, and ε is the random interference term.

3.2. Variable Selection

3.2.1. Explained Variables

Accounting robustness (AC) is the explanatory variable of this paper. This paper draws on the research of Khan and Watts (2009) and adopts the improved Basu (1997) model to measure the accounting robustness of enterprises, and the larger the value value, the higher the level of accounting robustness of enterprises.

3.2.2. Core Explanatory Variables

This paper constructs the core explanatory variable "the proportion of executives with financial background" (Frate) to measure the high and low proportion of executives with financial background, and at the same time uses "the number of executives with financial background" (Fnum) as the core explanatory variable for the robustness test. The number of executives with financial background (Fnum) is used as the core explanatory variable for the robustness test. The executives in this paper include general manager, president, CEO, vice president, vice president, secretary and other executives announced in the annual report. In this paper, having a financial background is defined as a person who has worked in a financial institution, organisation or company, including financial regulatory authorities, policy banks, commercial banks, insurance companies, securities firms, fund management firms, securities registration and settlement firms, futures firms, investment banks, trust companies, investment management companies, exchanges and so on.

3.2.3. Control Variables

Based on the reference of existing studies, the following control variables are considered to be added: company size (Size), gearing ratio (Lev), return on net assets (Roe), concurrent chairmanship and general manager (Dual), internal control index (Ici), percentage of independent directors (Idrate), percentage of shares held by the first largest shareholder

(Top1), the natural logarithm of the growth rate of operating income (Grow), and current ratio (Cratio). The variables and their definitions are shown in Table 1.

Table 1. Variable definitions

Variable type	Variable name	Variable code	Variable definition
Explained Variables	Accounting Robustness	AC	The larger the value, the higher the level of accounting robustness
Core Explanatory Variables	Percentage of executives with financial background	Frate	Number of executives with financial background/total number of executives
	Number of executives with financial background	Fnum	Number of executives with financial background
Control Variables	Company size	Size	Natural logarithm of total assets at the end of the period
	Gearing ratio	Lev	Book value of liabilities at the end of the period / Book value of assets at the end of the period
	Return on net assets	Roe	Profit after tax/net assets
	Combination of Two Positions	Dual	Chairman and general manager of the same person take 1, otherwise take 0
	Internal Control Index	Ici	Dibble internal control index plus 1 to take the logarithm
	Percentage of Independent Directors	Idrate	Number of independent directors/total number of directors
	Shareholding Ratio of the First Major Shareholder	Top1	Number of shares held by the largest shareholder/total number of shares
	Growth	Grow	Natural logarithm of operating income growth rate
	Liquidity Ratio	Cratio	Current assets/ Current liabilities

3.3. Sample Selection and Data Source

This paper selects all listed companies during the period from 2008 to 2020 as the initial research sample, and the criteria are strictly screened to ensure the completeness and accuracy of the data: firstly, taking into account that financial enterprises are themselves financial business attributes, it is not possible to observe the dynamic process before and after their hiring of executives with financial backgrounds, and thus it is not possible to understand whether executives with financial backgrounds have an impact on the accounting robustness of the enterprise. Secondly, ST and *ST enterprises are excluded; finally, listed companies with missing data are excluded. After the above processing, a total of 22,840 sample observations are finally obtained.

As for the data sources, the annual report data of listed companies used in the calculation of the explanatory variables, core explanatory variables and control variables come from the SSE, SZSE, Juchao Information Network and Dongfang Wealth Network, etc. The internal control index of the control variables comes from the DIB database. In addition, in order to avoid the

impact of extreme outliers on the regression results, this study refers to the previous method to Winsorize all continuous variables at the 1% and 99% quantile with two-sided shrinkage.

4. Empirical Research

4.1. Descriptive Statistical Analysis

Table 2 shows the results of descriptive statistical analysis. In the table, the mean value of the explanatory variable accounting robustness (AC) is 0.028 and the standard deviation is 0.484, the data suggests that there is a corresponding accounting robustness of Chinese listed companies. The mean value of the explanatory variable, the proportion of executives with financial background (Frate), is 0.048 and the standard deviation is 0.108, with a minimum value of 0 and a maximum value of 1. It can be assumed that Chinese listed firms have a certain number of talents with financial backgrounds of the executives, but some of the firms don't pay much attention to the financial backgrounds of the executives. As far as the control variables are concerned, the mean of company size (Size) is 22.143, which indicates that the enterprises in the sample have comparable strength in terms of size, and the standard deviation is 1.262, with the maximum and minimum values of 28.509 and 15.715, respectively, and there is a certain gap between the two data, which also indicates that there is a big difference between the companies in China in terms of size; the mean of the assets and liabilities ratio (Lev) is 0.434, which indicates that companies have certain advantages in solvency; the mean value of Growth is 0.120, which indicates that most of the companies have faster growth in operating income, and the minimum value is -5.551, which indicates that individual companies have negative growth in operating income. The descriptive statistics of the remaining control variables are presented in Table 2.

Table 2. Descriptive statistics analysis

Variables	Obs	Mean	Std	Min	Max
AC	22840	0.028	0.484	-7.131	6.597
Frate	22840	0.048	0.108	0	1
Size	22840	22.143	1.262	15.715	28.509
Lev	22840	0.434	0.205	0.007	1.352
Roe	22840	0.042	0.740	-72.146	6.918
Dual	22840	0.250	0.433	0	1
Ici	22840	6.334	1.004	0	6.902
Idrate	22840	0.373	0.054	0.091	0.800
Top1	22840	34.921	15.005	0.290	89.990
Grow	22840	0.120	0.380	-5.551	11.810
Cratio	22840	2.459	3.622	0.030	204.742

4.2. Correlation Analysis

After determining the variables, correlation analyses were conducted on the respective variables in order to prevent the problem of multicollinearity in the regression analysis, which would distort the established model and lead to inaccurate results. From the data in Table 3, it can be seen that the absolute value of all correlation coefficients is below 0.5, indicating that the correlation between the respective variables is not significant.

In order to ensure that the results of the study are closer to the text, this paper carries out a deeper study to test whether there is multivariate covariance among the variables, on the basis of which the test of Variance Inflation Factor (VIF) is carried out. In the test, when the value of VIF is greater than 5 or greater than 10, it means the stronger the covariance between the variables, while the smaller the value of tolerance (1/VIF), the less covariance. When the

tolerance is greater than 0.1, it means that there is no covariance between the respective variables. As can be seen in Table 4, VIF is less than 2, and 1/VIF is greater than 0.1. This shows that there is no significant covariance problem between the respective variables, and the next step of regression analysis can be carried out.

Table 3. Correlation analysis

	AC	Frate	Size	Lev	Roe	Dual	Ici	Idrate	Top1	Grow	Cratio
AC	1										
Frate	0.020***	1									
Size	-0.072***	0.003	1								
Lev	0.072***	-0.001	0.474***	1							
Roe	-0.034***	-0.004	0.034***	-0.095***	1						
Dual	0.016**	0.060***	-0.165***	-0.151***	0.006	1					
Ici	-0.050***	-0.024***	0.056***	-0.093***	0.165***	0.014**	1				
Idrate	0.009	0.012*	0.021***	-0.014**	-0.013*	0.116***	-0.003	1			
Top1	-0.029***	-0.030***	0.189***	0.065***	0.028***	-0.057***	0.069***	0.030***	1		
Grow	0.000	0.009	0.048***	0.036***	0.075***	0.028***	0.055***	-0.012*	0.028***	1	
Cratio	-0.049***	0.001	-0.240***	-0.483***	0.022***	0.109***	0.027***	0.019***	-0.027***	-0.035***	1

Table 4. Covariance

Variable	VIF	1/VIF
Lev	1.64	0.610
Size	1.37	0.729
Cratio	1.31	0.765
Ici	1.06	0.945
Top1	1.05	0.951
Dual	1.05	0.956
Roe	1.04	0.957
Idrate	1.02	0.983
Grow	1.01	0.987
Frate	1.01	0.995
Mean VIF	1.16	

4.3. Regression Analysis

After descriptive statistical analysis and correlation analysis, this paper uses stata15 software to conduct multiple regression analysis on the data in question. The regression results in Table 5 show that: under the random effect, the influence of executive financial background on corporate accounting robustness is positive (0.092) at the 1% level of Frate coefficient of column (1) before adding control variables, and R2 is raised to 0.002 after adding control variables, and the Frate coefficient of column (2) is still positive (0.085) at the 1% level; under the fixed effect, the influence of executive financial background on corporate accounting robustness is positive (0.085) at the 1% level of Frate coefficient of column (3) before adding control variables. background on firms' accounting robustness before adding control variables, the Frate coefficient of column (3) is positive (0.101) at the 5% level, R2 is raised to 0.006 after adding control variables, and the Frate coefficient of column (4) is still positive (0.098) at the 5% level. It can be seen that there is a significant positive correlation between the financial background of executives and corporate accounting robustness, thus the hypothesis H1 of this paper is verified.

The regression results of the control variables show that the Lev coefficient is positive at the 1% level under the random effect, and the Lev coefficient is still positive at the 1% level under the

fixed effect, and the data indicate that accounting robustness increases with the increase of the gearing ratio because the gearing ratio affects the company's solvency, and therefore an increase in the gearing ratio also leads to an increase in the company's financial risk, and the financial personnel will pay more attention to the statement prepared with more caution, which in turn improves accounting robustness. The Roe coefficient is negative at the 10 per cent level under random effects and at the 5 per cent level under fixed effects, the data suggests that the greater the return on equity the weaker the accounting robustness of the firms, as firms with very high levels of profitability often lack stability, leaving the rest of the operations in a poor condition, which leads to poor robustness. The percentage of independent directors (Idrate), dual positions (Dual), and growth (Grow) at different significance levels are all significantly and positively correlated with corporate accounting robustness, i.e., those with more independent directors, dual positions of chairman and general manager, and faster sales growth rates will have higher corporate accounting robustness. Meanwhile, the internal control index (Ici), current ratio (Cratio), and the proportion of shares held by the first largest shareholder (Top1) are all significantly negatively related to corporate accounting soundness.

Table 5. Regression results

Variables	(1)	(2)	(3)	(4)
	Re		Fe	
Frate	0.092***	0.085***	0.101**	0.098**
	(3.03)	(2.90)	(2.38)	(2.33)
Size		-0.049***		0.008
		(-16.85)		(1.33)
Lev		0.286***		0.280***
		(14.46)		(7.68)
Roe		-0.008*		-0.010**
		(-1.92)		(-2.26)
Dual		0.014*		0.021*
		(1.87)		(1.67)
Ici		-0.013***		-0.010***
		(-4.10)		(-2.73)
Idrate		0.105*		0.022
		(1.80)		(0.23)
Top1		-0.000		-0.001**
		(-1.48)		(-2.57)
Grow		0.005		0.000
		(0.56)		(0.01)
Cratio		-0.003***		-0.001
		(-2.99)		(-0.64)
Cons.	0.025***	1.054***	0.023***	-0.170
	(6.57)	(16.00)	(6.05)	(-1.24)
Obs	22,840	22,840	22,840	22,840
R^2	0.001	0.002	0.001	0.006

Notes: z-values in parentheses, ***, ** and * indicate significant at the 1 per cent, 5 per cent and 10 per cent levels, respectively, as below.

4.4. Robustness Test

In order to test whether the model is reliable or not, this paper will conduct a robustness test, which aims to compare whether the results obtained change when a parameter variable of the

sample is changed. In the robustness test, this paper uses the number of executives from financial background (Fnum) as the core explanatory variable for the robustness test. As can be seen from Table 6, the coefficient of the core explanatory variable Fnum (the number of executives with financial background) is positive at the 5% level regardless of whether other control variables are added or not, indicating that the financial background of the executives can significantly enhance the robustness of corporate accounting, which is in line with the results of the previous paper. As a result, the model is robust and hypothesis H1 is proved again.

Table 6. Robustness test

Variables	(5)	(6)	(7)	(8)
	Re		Fe	
Fnum	0.011**	0.013**	0.016**	0.015**
	(1.97)	(2.46)	(2.07)	(2.02)
Size		-0.050***		0.008
		(-16.92)		(1.31)
Lev		0.286***		0.280***
		(14.46)		(7.68)
Roe		-0.008*		-0.011**
		(-1.93)		(-2.27)
Dual		0.014*		0.021*
		(1.88)		(1.65)
Ici		-0.013***		-0.010***
		(-4.14)		(-2.76)
Idrate		0.107*		0.023
		(1.82)		(0.24)
Top1		-0.000		-0.001**
		(-1.48)		(-2.56)
Grow		0.005		-0.000
		(0.54)		(-0.01)
Cratio		-0.003***		-0.001
		(-2.99)		(-0.65)
Cons.	0.026***	1.062***	0.023***	-0.167
	(6.91)	(16.11)	(6.06)	(-1.21)
Obs	22,840	22,840	22,840	22,840
R^2			0.001	0.006

5. Conclusion and Countermeasure Suggestions

Accounting robustness can reflect the information asymmetry of the enterprise, improve the accounting robustness of the enterprise can promote the financial sound operation of the enterprise and reduce the accounting risk. The information quality of accounting does not only depend on the reports issued by financial personnel, but is also related to the background characteristics of top management. Using relevant data of Chinese listed companies from 2008 to 2020 as a research sample, this paper analyses the impact of top executives' financial background on corporate accounting robustness using the C-Score model. The empirical study finds that the financial background of executives of listed companies can significantly improve corporate accounting robustness, i.e., the accounting robustness of firms with executives with financial background is significantly higher than that of firms with executives without financial background. Based on the above findings, this paper puts forward the following three suggestions.

First, focus on the background characteristics of the executive team. Internally, enterprises should pay more attention to the background characteristics of existing executives, and if there are useless or duplicated resources, they can make appropriate adjustments and reasonable combinations; externally, enterprises can pay more attention to the characteristics of the financial background of the hired personnel when hiring senior executives, and if they can contribute to the long-term development of the enterprise in the future, and seek more benefits for the enterprise, they should actively seize the opportunity to let the excellent personnel to join the enterprise and improve the executive team. If they can contribute to the future long-term development of the enterprise and seek more benefits for the enterprise, they should actively seize the opportunity to let the excellent personnel join the enterprise and improve the composition of the executive team. Second, strengthen the quality of executives. Executives should always train and deepen their professional skills, keep abreast of the times, always reflect on their own knowledge gained from their past experience, keep learning, strengthen the understanding of the professional field, constantly practice and summarise, use appropriate and reasonable way to obtain benefits, help the development of the enterprise. Moreover, we should maintain good professionalism, utilise the advantages of our financial background and our ability to process information, and make more accurate decisions by exploiting our strengths and avoiding our weaknesses. Thirdly, reasonable selection of matching executives. Enterprises can select management personnel from multiple backgrounds to prevent over-allocation of the same resources, resulting in idle resources. Moreover, when executives from diversified professional backgrounds make decisions together, they can gather their professional experience to synthesise and weigh the current situation, make neutral and reasonable decisions, and avoid overly aggressive investment behaviours.

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