

Research on Executive Background Heterogeneity and Enterprise Performance

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ABSTRACT. *This paper builds a multivariate regression model with A-share listed companies from 2014-2018 as a sample to empirically examine the relationship between executive background heterogeneity and firm performance. The study found that: (1) executive age heterogeneity and executive education background heterogeneity are significantly positively correlated with corporate performance; (2) executive authority background heterogeneity is significantly negatively correlated with corporate performance; (3) There is no significant correlation between executive term heterogeneity and firm performance. The above findings provide new ideas for the construction of corporate executive teams and policy recommendations for promoting enterprise innovation-driven strategies.*

KEYWORDS: *Executive Background, Heterogeneity, Enterprise Performance*

1. Introduction

In the new economic era, China's economy is undergoing a transformation from high-speed development to medium-high-speed development. The new economic growth theory holds that the economic growth of a country mainly depends on the accumulation of knowledge, technological progress and the level of human capital. Social and economic development leads to the increasing importance of technological progress in the economy. According to the high ladder theory, the background characteristics of senior executives affect the values and cognitive basis of senior executives, which are reflected in the difference in organizational results and the effectiveness of strategy [1]. China is experiencing a change the way of economic growth, industrial structure optimization and innovation of the construction of national key period, in the enterprise human capital quality and improve the situation, how to reasonably effective use of enterprise human capital, improve the executive team construction, and for the growth of the national economy and enterprise's economic performance has the very strong practical significance. Therefore, this paper mainly studies the impact of background heterogeneity of senior executives and corporate performance, enriches theories related to the background characteristics of senior executives and corporate

performance, and provides theoretical support for the establishment of senior executives' teams and the improvement of corporate performance.

2. Research hypothesis

H1: Age heterogeneity of executives is positively correlated with corporate performance.

H2: Heterogeneity of tenure is negatively correlated with corporate performance.

H3: The average level of education of executives is positively correlated with firm performance.

H4: Functional background heterogeneity of executive team is negatively correlated with corporate performance.

3. Research design

3.1 Variable design

Variables are defined as follows:

Table 1 Variable definitions

Variable name	Symbol	Definition
Corporate Performance	Tobin'Q	Enterprise Market/Asset Replacement Cost for i + 2 Years
Age heterogeneity	Agehe	age standard deviation / age average
Heterogeneity Term	Termhe	Term standard deviation /Term average
Educational heterogeneity	eduhe	Executive team members education level diversification (Herfindal coefficient)
background heterogeneity	Hbacehe	Executive team members occupational background diversification (Herfindal coefficient)
Asset-liability ratio	Lev	Total liabilities / Total assets
Company Size	Size	The natural logarithm of the company's total assets
Executives combine two roles	Dual	The chairman and CEO of the two are united together = 1, otherwise =0
Operating income growth rate	Growth	Growth in the t-year business income - the first (t-1) year operating income / the t-year operating income
Concentration of equity	Contl	The shareholding ratio of the largest shareholder
Industry	Indus	Industry dummy variable
Year	Year	Year dummy variable

In this paper, the H coefficient is used to represent the heterogeneity of executive education background and executive function background, and the standard deviation coefficient is used to represent the heterogeneity of executive age.

The formula of H coefficient is: $H = 1 - \sum_{i=1}^n P_i^2$

The educational and functional backgrounds are classified as shown in Table 2.

Table 2 The classification of Education and functional background

Code	Education classification	Functional classification
1	Secondary and secondary school	management
2	College	financial management
3	Undergraduate	Technology Development
4	Master's Degree	Economics and Finance
5	PhD	Market, law, human resources and others

In order to test the impact of the characteristics of the senior management team on enterprise performance, the following model is constructed:

$Tobin'Q = \alpha_0 + \alpha_1 Characteristics + \alpha_2 Lev + \alpha_3 Size + \alpha_4 Dual + \alpha_5 Growth + \alpha_6 Contl(1)$

In summary, the variables selected in this paper and their calculation formulas are shown in Table 1. The software used in this article is Stata15.

4. The empirical results

4.1 Correlation analysis results

Table 3 Correlation test

	Tobin'Q	Agehe	Termhe	Eduhe	Hbacehe	Size	Lev	Dual	Contl	Growth
Tobin'Q		0.069	-0.304***	-0.046	-0.041	-0.734***	-0.647***	0.198***	-0.09	0.135*
Agehe	0.079		0.141**	0.461***	0.217***	0.046	0.042	0.093	0.075	0.051
Termhe	-0.167***	0.09		0.089	-0.027	0.379***	0.318***	-0.048	-0.019	-0.058
Eduhe	0.031	0.370***	0.104		0.084	0.112	0.102	-0.043	0.112	0.092
Hbacehe	-0.086**	0.156***	0.070*	0.079		0.001	0.077	0	-0.043	0.087
Size	-0.517***	-0.015	0.291***	0.117*	0.048		0.557***	-0.218***	0.082	-0.093
Lev	-0.342***	-0.005	0.199***	0.067	0.016	0.478***		-0.137**	0.025	-0.122*
Dual	0.091**	0.084	0.003	-0.052	0.009	-0.115***	-0.084**		-0.004	0.059
Contl	-0.124***	0.038	0.051	0.103	0.04	0.142***	0.086**	-0.048		0.001
Growth	0.160***	-0.014	0.056	0.059	0.055	-0.018	0.068*	-0.007	-0.001	

4.2 The empirical results

Table 4 Regression results

	(1)	(2)	(3)	(4)
	Tobin'Q	Tobin'Q	Tobin'Q	Tobin'Q
<i>Agehe</i>	2.381*			
	(1.93)			
<i>Termhe</i>		-0.665		
		(-1.17)		
<i>eduhe</i>			1.443**	
			(2.48)	
<i>Hbacehe</i>				-2.014***
				(-2.81)
others	Y	Y	Y	Y
N	Y	Y	Y	Y
Adj-R ²	Y	Y	Y	Y

Note: * indicates significant at 10% level; ** indicates significant at 5% level; *** indicates significant at 1% level.

4.3 Robustness test

Based on the research of Tang Guoping (2012), this paper randomly samples 80% of the samples and then returns to test the relationship between executive background and corporate performance [2]. The results were consistent with the regression results¹.

5. Research conclusions and recommendations

Based on the data collected from A-share listed companies in 2014-2018, this paper empirically studies the correlation between corporate executive background characteristics and corporate performance, and draws the following conclusions:

¹ Among them, the age heterogeneity of executives was positively correlated with corporate performance at a significant level of 5%, and the correlation coefficient was 3.151; There was no significant correlation between executive heterogeneity and firm performance, and the correlation coefficient was -0.468; The heterogeneity of executive education level and corporate performance were positively correlated at the 1% significance level, and the correlation coefficient was 1.795; The heterogeneity of executive function background was significantly negatively correlated with corporate performance at the 1% significance level. And the correlation coefficient is -2.272.

(1) The age heterogeneity of the senior management team of listed companies has a significant positive impact on the business performance industry;

(2) The heterogeneity of the education level of the senior management team of listed companies has a significant positive impact on the enterprise performance industry;

(3) The heterogeneity of the executive team's functional background in listed companies has a significant negative impact on the corporate performance industry;

(4) There is no significant correlation between the heterogeneity of the senior management team of the listed company and the corporate performance industry.

References

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