

The influence of senior management elders and the second generation of family firms on inefficient investment

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Abstract: *In family businesses between generations later, the second generation to become a member of the senior management team, embedded within the senior management team, the common interests, the second generation of decision-making behavior inevitably affect other stakeholders, in turn, the second generation will be influenced by other stakeholders, so what executives in family firms are more likely to affect the second generation of decision-making behavior? Given China's traditional culture of elders, the oldest and longest-tenured executives are naturally mentioned. Therefore, this paper explores the influence of the age difference and tenure difference of the second-generation senior executive elders on the inefficiency investment of family enterprises after inheritance, and verifies the moderating role of the chairman of the second-generation.*

Keywords: *family business inheritance; Second generation succession; Senior executive elder; Non efficient investment*

1. Introduction

As the main part of Chinese private enterprise family business, it made indelible contribution to the economic miracle of high speed growth since the reform and opening. At present, family enterprises enter the peak period of inheritance, but it seems that "rich in three generations" is a common fault of family enterprises ^[1]. In the early stage of family business inheritance, the second generation takes over the family business, breaking the original balance and stable organizational structure of the enterprise, and making the enterprise in a relatively unstable state. As an important organization of the enterprise, the senior management team will also experience certain turbulence in this stage. With the entry of the second generation into the senior management team, the composition of the senior management team changes, which will inevitably affect the investment strategy of the enterprise, thus having a certain impact on the investment efficiency. Generally speaking, the second generation of succession in family enterprises is younger. According to existing literature analysis, there are problems such as lack of experience, lack of authority but eager to make achievements after radical succession, which may lead to irrational behaviors in investment decisions. There are also the second generation who, in order to maintain their career, hold the idea of "seeking no merit, but seeking no fault" when making decisions ^[2]. Therefore, in the face of this situation, someone in the senior management team needs to timely advise and give guidance to some impulsive and risky investment decisions and overly conservative and unenterprising decision-making behaviors of the second generation. Zhu (2018) based on the logic of paternalism, showed that parents would take positive behavioral measures to pave the way for the second generation to take over and succeed ^[3]. This paper is not confined to the help of parents to the second generation, but focuses on the entire senior management team. Based on the traditional Chinese elder culture, it is found that senior executives with longer tenure in enterprises are usually more likely to advise the second generation. Based on this, this paper studies the influence of the oldest and longest-serving senior executive elders in the senior management team on the inefficiency investment after family business inheritance, and analyzes the influence of the age difference and tenure difference between senior executive elders and the second generation in the senior management team on the inefficiency investment after family business inheritance. Furthermore, the moderating effect of the formal power brought by the second generation chairman is investigated.

2. Theoretical analysis and research hypothesis

Hambrick and Mason (1984) believe that it is difficult to directly measure the cognition and values of senior executives in the research [4]. Therefore, it is proposed to predict the decision-making behavior and results by examining the demographic characteristics of senior executives. In other words, it means to predict organizational outcomes based on demographic characteristics such as gender, age, education level and tenure. Second, the important feature of higher-order theory is its focus on top management teams rather than a strict focus on a single chief executive. Hambrick (2007) noted that focusing on the executive team rather than individuals can often better explain organizational results, indicating that to understand organizational results, attention should be paid not only to the CEO, but also to the entire top management team. With regard to using the collective characteristics of the executive team (demographic or otherwise) to predict corporate strategy or performance, Jackson (1992) has suggested that it would be wiser to identify subgroups primarily responsible for certain types of decisions (or specific areas of action) and then use only their characteristics to predict actions. At the same time, "sub-teams" improve the prediction strength of higher-order theories. Nielsen (2010) also pointed out that treating diversity as a generic one-dimensional concept does not reflect its complex nature and impact, and all aspects of diversity do not affect team decisions and company performance in the same way. Therefore, it is suggested to decompose the structure of diversity into a single attribute and consider various diversity attributes independently [5]. Based on this, according to the particularity of family enterprises after inheritance and combined with traditional Chinese ideology and culture, this paper selects senior executives who are more able to advise the behavior of the second generation as the research object, and focuses on the influence of age difference and tenure difference between senior executives and the second generation on the inefficiency investment after inheritance.

2.1 The relationship between the age difference between the second generation and senior management elders and inefficient investment

To a certain extent, age reflects individual experience, values and risk preferences (Zhang Jianjun et al., 2016), which will affect the perspective and choice of strategic decision-making [6]. Studies have shown that flexibility decreases with age and rigidity and resistance to change increase. For older executives, financial and occupational security can become very important. They may therefore avoid making risky decisions, which may include major changes in the company's strategic direction. Younger managers, on the other hand, tend to be more risk-conscious; Lower executive age is associated with company growth and volatility of sales and earnings [7]. At the same time, age is an important variable to predict the non-work-related experiences of individuals. People of similar age have common experiences, which leads to common attitudes and perceptions. The diversity of age is expected to increase the diversity of decision-making problems faced by the company, thereby stimulating the consideration of risk.

Generally speaking, the second generation of succession in family enterprises is younger. According to existing literature analysis, they may have irrational behaviors in investment decisions due to lack of experience, authority and eagerness to make achievements after succession. Comparatively speaking, senior executives have sufficient experience and rich social resources. As the saying goes, "the home has a old, if there is a treasure", under the influence of Chinese traditional culture, just to take over the second generation of older executives more respect, pay more attention to their proposal, executives in a take good care of the younger generation, will more attentively to treat enterprise's investment decision-making behavior, the psychological interaction of both sides pass through the company's business decisions, Whether it can have a positive impact on the investment efficiency of family enterprises after inheritance. Different ages, on the other hand, the cognition of physical differences, the second generation and executives the elder age difference, the greater the companies face a variety of cognitive differences may investment activity, the greater the perception of the risk of investment activities to produce the difference is, the greater the this kind of human capital can be complementary to a certain extent, inhibit the efficiency of investment. Based on the above discussion, this paper proposes the following hypotheses:

Hypothesis 1: The age difference between the second generation and senior management elders is negatively correlated with the level of inefficient investment.

2.2 The relationship between the tenure difference of the second generation and senior management elders and inefficient investment

The larger term difference between the second generation and senior executives reflects the longer term of senior executives in the enterprise, so senior executives can obtain more key knowledge resources and network resources, which can provide better investment decisions for their successors^[8]. At the same time, as executives grow in seniority, their ability to access valid information grows. After fully and effectively grasping the investment signals transmitted by the capital market, senior executives can guide their successors' investment strategies and help the company improve investment efficiency. In addition, the longer executives stay at the company, the more they learn about the company. As a result, executives do not allow management to deviate from core competencies (Miller & Shamsie, 2001), so they scrutinize the investment decisions of their successors more critically^[9]. On the other hand, some scholars put forward the opposite view, believing that the difference in tenure between the second generation and the senior senior elders will result in the personal authority gap, which will challenge the formal power of the second generation who just took over. Will this challenge lead to the irrational decision-making behavior of the second generation? And studies have shown that long tenure can have some negative effects. For example, Kor (2006) pointed out that long-term managers are more risk-averse and less willing to invest in R&D, which leads to insufficient investment. In addition, managers with long tenure may receive less external information and acquire external knowledge slowly, leading them to choose negative NPV projects, resulting in overinvestment^[10]. In this case, the larger the term gap between the second generation and senior executive elders, the stronger the personal authority of senior executives, and the investment decision ideas of the second generation may be disturbed and changed. However, this paper believes that resource complementarity brought by tenure difference is more important. Based on the above analysis, the following hypotheses are proposed:

Hypothesis 2: The tenure difference between the second generation and senior management elders is negatively correlated with the level of inefficient investment.

2.3 The moderating effect of the chairman identity of the second generation

The chairmanship of the second generation indicates that the second generation has been given the highest formal authority by the organization. The importance of power gap is particularly important in the Chinese context due to high power distance and authoritarian cultural traditions (Zhang, Liu, 2009). The power gap can make the second generation who just took over more confident, enable them to show leadership confidently, and also create conditions for other senior executives to play their corresponding roles to a certain extent^[11]. Evolutionary psychology has found that when people feel more confident and secure, they are more likely to tolerate different voices and opinions, and more willing to take risks associated with their actions (Nicholson, 1998).

The second generation, who are younger and have a short term in the enterprise, lacks informal power in the enterprise when they first take over. At this time, the existence of formal power may increase their confidence and inner security to a certain extent, and they are more willing to take the risk of enterprise investment decisions. However, other studies have shown that arrogant successors are often eager for change and innovation in order to show their talent, establish authority and achieve ambition (Kellermanns et al., 2008), even at the cost of overturning the policies made by the previous generation. Because the successor has not been involved in the growth of the company, they may not understand the development of the company. In such cases, successors rely more on executive elders to help them make decisions. In existing literature there is no clear forecast the second generation of formal elders on executive power and the influence of the relationship between the efficiency of investment, therefore, this article will be the second generation, the chairman of the formal power as regulating variable, and to explore its executives may have on the second generation - the elder age difference, difference and the efficiency level of investment office has implications. Based on this, the following assumptions are made:

Hypothesis 3a: The chairman status of the second generation has a moderating effect on the relationship between the age difference between the second generation and senior management elders and inefficient investment;

Hypothesis 3B: The chairman status of the second generation has a moderating effect on the relationship between the tenure difference between the second generation and senior executive elders and inefficient investment.

3. Study design and variable measurement

3.1 Data and samples

This paper is based on the data of listed companies in Shanghai and Shenzhen from 2003 to 2020. The original data of demographic characteristics, corporate information and financial status of the second generation and senior executives of family enterprises used in this study were obtained from CSMAR database and Sina Financial website, and verified and supplemented by Baidu search for relevant news interviews and reports. Then, according to the data acquisition of variables, the samples with missing variable data were removed, and 160 listed family enterprises were finally determined as the empirical research samples of this paper.

3.2 Variables and measurement

3.2.1 Dependent variable: inefficient investment

In this paper, the investment prediction model of Richardson (2006) is used to measure the level of inefficiency investment of enterprises, and inefficiency investment is used as the explained variable in the two-part study^[12]. The enterprise investment level is estimated as shown in Model (1), and the residual represents the actual investment amount of each company minus the normal investment amount, that is, the abnormal investment amount of each company. When the residual is greater than 0, the abnormal investment is greater than 0, representing the overinvestment level; When the residual is less than 0, the abnormal investment is less than 0, representing the level of underinvestment.

$$Inv_{i,t} = \beta_0 + \beta_1 TobinQ_{i,t-1} + \beta_2 Lev_{i,t-1} + \beta_3 Cash_{i,t-1} + \beta_4 Age_{i,t-1} + \beta_5 Size_{i,t-1} + \beta_6 RET_{i,t-1} + \beta_7 INV_{i,t-1} + \sum Year + \sum Indus + \varepsilon_{i,t-1} \quad (1)$$

Where, $Inv_{i,t}$ represents the total investment of the i th company in year t , which can be calculated by dividing the sum of changes in the original price of fixed assets, engineering materials and construction in year t by the total assets at the end of year $T-1$. $TobinQ_{i,t-1}$ is the company's TobinQ value in year $t-1$, which is calculated from the market value of the company's shareholders' equity plus net debt divided by total assets at the beginning of the year; $Lev_{i,t-1}$ is the asset-liability ratio of the first company at the end of $T-1$; $Cash_{i,t-1}$ is the cash holdings of company I in year $t-1$; $Age_{i,t-1}$ is the number of listed years of the i th company in year $t-1$, and take the natural logarithm of the number of listed years. $Size_{i,t-1}$ The size of the i th company in year $t-1$, taking the natural logarithm of the total assets of the company; $RET_{i,t-1}$ Stock return of the i th company in year $t-1$; Industry and Year are control variables for Industry and Year, respectively. In this paper, the absolute value of regression residuals (ABS_INV) is used as a surrogate variable for enterprise investment efficiency residuals. When the absolute value of regression residuals is larger, it indicates that the listed companies have higher level of inefficiency investment, that is, low level of investment efficiency, and vice versa.

3.2.2 The independent variable

When studying the demographic characteristics of senior management teams, the commonly used background characteristic variables are: gender, age, educational background, professional background, tenure, occupational background, financial status, etc. This paper studies the heterogeneity between the senior management team of family enterprises with the characteristics of remongers and the second generation. Referring to this kind of research literature, this paper selects background characteristics that are more suitable for this research: age and tenure, so as to make an analysis.

Heterogeneity of second-generation and family elders was measured using the difference of 2 variables: age difference and tenure difference. The age difference was calculated by subtracting the age of the second generation from the age of the senior senior. The difference in tenure is calculated by subtracting the tenure of the senior executive from the tenure of the second generation, with a positive value indicating that the senior executive has stayed in the job longer than the second generation.

3.2.3 Adjusting variables

Whether the second generation is President is taken as the moderating variable. The second generation is 1 for the chairman, and 0 otherwise.

3.2.4 Control variables

The scale and operation condition of the enterprise affect the investment efficiency of the enterprise. This paper reference literature and data availability, enterprise scale, return on total assets,

asset-liability ratio, tobin Q value, ratio of working capital and revenue growth rate as control variable, and based on the annual virtual variable is introduced to control the time effect, all of the control variables are the lag issue.

3.3 Research Model

In order to test the research hypothesis proposed in this paper, according to the set variables, models (1-1) (1-2) are established to study the influence of tenure and age differences of the second generation and senior executive elders on the inefficiency investment of enterprises after inheritance. The two characteristic variables are separately regressed in the study, and then the two variables are put into a model (1-3) for regression.

$$\text{Abs_inv}_t = \alpha_0 + \alpha_1 \text{Hage} + \alpha_2 \text{Size}_{t-1} + \alpha_3 \text{Lev}_{t-1} + \alpha_4 \text{Tobin_Q}_{t-1} + \alpha_5 \text{Growth}_{t-1} + \alpha_6 \text{CCR}_{t-1} + \alpha_7 \sum \text{Year} + \alpha_8 \sum \text{Indus} + \varepsilon \quad (2)$$

$$\text{Abs_inv}_t = \alpha_0 + \alpha_1 \text{Hten} + \alpha_2 \text{Size}_{t-1} + \alpha_3 \text{Lev}_{t-1} + \alpha_4 \text{Tobin_Q}_{t-1} + \alpha_5 \text{Growth}_{t-1} + \alpha_6 \text{CCR}_{t-1} + \alpha_7 \sum \text{Year} + \alpha_8 \sum \text{Indus} + \varepsilon \quad (3)$$

$$\text{Abs_inv}_t = \alpha_0 + \alpha_1 \text{Hage} + \alpha_2 \text{Hten} + \alpha_3 \text{Size}_{t-1} + \alpha_4 \text{Lev}_{t-1} + \alpha_5 \text{Tobin_Q}_{t-1} + \alpha_6 \text{Growth}_{t-1} + \alpha_7 \text{CCR}_{t-1} + \alpha_8 \sum \text{Year} + \alpha_9 \sum \text{Indus} + \varepsilon \quad (4)$$

In order to verify the moderating effect of the chairman's identity of the second generation on the relationship between the age difference, tenure difference and inefficiency investment of the second generation and senior executive elders, the cross multiplication term of the age difference between the second generation and senior executive elders and the chairman's identity of the second generation was added on the basis of model 1. On the basis of model 2, the term difference between the second generation and senior executive elders and the identity of the second generation chairman were added. Finally, both intersection terms are put into model 3.

4. Empirical results

In the previous part, this paper conducted theoretical analysis on the basis of literature review, so as to propose research hypotheses, construct research models, and use SPSS17.0 to conduct empirical analysis on the data. This chapter will verify the above hypotheses through descriptive statistics, correlation analysis and regression analysis.

4.1 Descriptive statistical analysis

In order to avoid the influence of extreme values of some samples, Stata17.0 was used to deal with outliers at 1% level for each variable before data processing. From the descriptive statistical results of each variable, it can be seen that inefficient investment is universal in family enterprises. According to the calculation results of the investment forecast model, the absolute value obtained is the inefficiency investment (Abs_inv) of the enterprise. The closer Abs_inv is to 0, the more efficient the investment is. According to statistics, only 8 family enterprises in the sample have $\text{Abs_inv} < 0.001$, accounting for 3.57% of the total sample, indicating that many companies have inefficient investment. At the same time, the median of inefficiency investment is 0.03, the mean is 0.035, the maximum is 0.233, and the minimum is 0, showing great differences among family firms, indicating that the phenomenon of inefficiency investment in family firms after inheritance is still relatively serious. Therefore, it is necessary and feasible to study the influence mechanism of inefficient investment. In addition, Table 2 shows that older and longer-tenured executives are common in family firms after inheritance. The average age difference between the second generation and senior senior elders is 24.46, and 78.7% of senior senior elders are 20 years or more older than the second generation, indicating that there is a large age difference between the second generation and senior senior elders in family enterprises. The percentage of tenure difference greater than 0 is 89.69%, indicating that there are executives with longer tenure than the second generation in the vast majority of enterprises. In addition, the data on the control variables show that 36.7% of the second generation in the sample are chairmen, indicating that most of the second generation are still general managers or vice chairmen.

Before the regression analysis, this paper tested the multicollinearity of the variables involved in the first model. According to the collinearity diagnostic analysis, the collinearity diagnostic factor VIF of all variables was far less than 5, indicating that there was no serious problem of multicollinearity among all variables.

4.2 Analysis of regression results

4.2.1 Main effect test of heterogeneity of the second generation and senior management elders and inefficiency investment of enterprises after inheritance

Table 1 is the test of the relationship between the age difference, tenure difference and inefficient investment of the second-generation and senior executive elders, namely the verification of models 1-3. According to the regression results, the regression equations are all significant at the level of 1%, indicating that they have passed the test. In addition, according to the adjusted R2 of the model, the independent variables of the regression equation can better explain the variation of the dependent variable, and the fitting degree is good. On the whole, the equation is statistically significant. It is valid and can explain the relationship between variables to a certain extent, which can be further analyzed in detail. In column (1), it can be seen that the relationship between the age difference between the second generation and the senior executive elders and the enterprise's inefficiency investment is significantly negative with the coefficient of Hage ($\beta=-0.001$, $P<0.01$), indicating that the age difference between the second generation and senior management elders has a significant negative correlation with the inefficiency investment of the enterprise, that is, the larger the age difference between the second generation and senior management elders, the lower the inefficiency investment level after the enterprise inheritance. The complementarity of the age difference between the two can alleviate the inefficiency investment of the enterprise. Hypothesis 1 is verified. The first column (2) it can be seen that, the second generation - the differential term executive elders and the relationship between the efficiency of investment, Hten coefficient is 0.002, and 1% significance level, that the second generation - the differential term executive elders and the efficiency of investment has significant negative correlation relationship, the executives than the second generation of the longer term, the elders enterprise after inheriting the efficiency investment level is lower, The greater the difference in tenure between the two, the more efficient investment can be alleviated. Hypothesis 2 is verified. The above two proxy variables were put into the model (1-3) at the same time. According to the regression equation (3), the coefficient of Hage was significantly negative ($\beta=-0.001$, $P<0.01$), the coefficient of Hten was significantly negative ($\beta=-0.002$, $P<0.01$), and hypotheses 1 and 2 were further verified. This indicates that the older the age difference and tenure difference of the second-generation senior management elders, the more they can inhibit the inefficient investment.

Table 1: Regression results

	(1)	(2)	(3)
Hage	-0.001*** (-3.515)		-0.001*** (-3.479)
Hten		-0.001* (-1.868)	-0.001* (-1.817)
Size	-0.004 (-1.345)	-0.003 (-0.952)	-0.003 (-0.962)
ROA	0.007 (0.157)	0.011 (0.232)	0.005 (0.110)
Lev	0.002 (0.093)	0.001 (0.064)	-0.000 (-0.025)
Tobin Q	0.005*** (3.398)	0.006*** (3.807)	0.005*** (3.350)
Growth	0.002** (1.988)	0.002* (1.877)	0.003** (2.078)
CCR	-0.045*** (-3.217)	-0.048*** (-3.349)	-0.046*** (-3.284)
Constant	0.144** (2.328)	0.101 (1.588)	0.128** (2.073)
Year	control	control	control
Observations	160	160	160
R-squared	0.258	0.215	0.274
r2 a	0.224	0.179	0.235
F	7.540	5.962	7.110

4.2.2 Test whether the second generation is the moderating effect of the chairman

Table 2: Regression results of moderating variables

	(1)	(2)	(3)	(4)	(5)	(6)
Hage	-0.001***	-0.000			-0.001***	-0.000
	(-3.125)	(-1.070)			(-3.084)	(-0.886)
Hten			-0.001*	-0.001	-0.001*	-0.001
			(-1.879)	(-1.388)	(-1.822)	(-1.379)
President	0.004	0.034**	0.009*	0.010	0.004	0.042**
	(0.767)	(2.007)	(1.736)	(1.128)	(0.790)	(2.252)
Hage × President		-0.001*				-0.001**
		(-1.860)				(-2.104)
Hten × President				-0.000		-0.001
				(-0.225)		(-0.508)
Size	-0.004	-0.003	-0.003	-0.003	-0.003	-0.002
	(-1.321)	(-1.223)	(-0.906)	(-0.912)	(-0.937)	(-0.799)
ROA	0.013	0.016	0.023	0.024	0.011	0.016
	(0.272)	(0.342)	(0.467)	(0.484)	(0.230)	(0.343)
Lev	0.001	-0.001	-0.000	-0.000	-0.001	-0.004
	(0.065)	(-0.051)	(-0.009)	(-0.020)	(-0.054)	(-0.227)
Tobin Q	0.005***	0.005***	0.006***	0.006***	0.005***	0.004***
	(3.405)	(3.051)	(3.774)	(3.677)	(3.358)	(2.820)
Growth	0.003**	0.002*	0.003**	0.003**	0.003**	0.002*
	(2.050)	(1.904)	(2.060)	(2.037)	(2.142)	(1.956)
CCR	-0.045***	-0.043***	-0.047***	-0.046***	-0.045***	-0.043***
	(-3.164)	(-3.063)	(-3.244)	(-3.201)	(-3.231)	(-3.062)
Constant	0.138**	0.118*	0.093	0.094	0.123*	0.099
	(2.227)	(1.893)	(1.477)	(1.474)	(1.972)	(1.574)
Year	control	control	control	control	control	control
Observations	160	160	160	160	160	160
R-squared	0.261	0.277	0.231	0.231	0.277	0.299
r ² a	0.221	0.234	0.190	0.185	0.233	0.247
F	6.653	6.394	5.663	5.007	6.374	5.731

In order to verify the moderating effect of the chairman's identity of the second generation on the relationship between the age difference, tenure difference and inefficient investment of the second generation - senior executive elders, this paper uses hierarchical regression method to verify. The first step is the regression of age difference, tenure difference and inefficient investment, namely the regression of model (1-3). The previous part has been processed and will not be repeated in this part. The second step introduces the chairman identity variable of the second generation, and makes the regression analysis with the inefficiency investment. In the third step, the interaction term between the chairman's identity and age difference of the second generation (Hage × President) and the interaction term between the chairman's identity and tenure difference of the second generation (Hten × President) are introduced as independent variables. The regression results are shown in Table 2. Regression equation in table 2 (1), (2), respectively, to verify the identity of the chairman of the board of the second generation of the second generation - executives elders age difference, and the efficiency of investment relationship adjustment effect of two process, can be seen from the regression equation (1), the chairman of the board of the second generation identity (President) and the efficiency of investment is not significant correlation between directly. As can be seen from regression equation (2), the coefficient of the interaction term between the chairman of the second generation and the age difference between the second generation and the senior executive elders is -0.01, and is significantly correlated at the 10% level, indicating that the chairman of the second generation enhances the impact of age difference on inefficiency investment. Hypothesis 3A passes the test. Regression equation in table 2 (3), (4) respectively to verify the identity of the chairman of the board of the second generation of the second generation - the differential term executive elders and the efficiency of investment relationship adjustment effect of two process, from the regression equation (3) (4) as you can see, the chairman of the board of the second generation of the identity and the second generation - interaction of executive the elder age difference coefficient is not significant, That is, the chairman identity of the second generation does not have a significant moderating effect on the relationship between the tenure difference between the second generation and senior executive elders and the inefficient investment

relationship. Hypothesis 3B fails to pass the verification. Put the above two proxy variables into the model at the same time, and the result can be seen from the regression equation (6) in Table 2, the coefficient of is -0.02, and is significantly correlated at the level of 1%. Hypothesis 3A has been further verified.

4.3 Endogeneity issues and robustness tests

4.3.1. Endogeneity problem

The independent variables of this study are the age difference and tenure difference between the second generation and senior management elders, which are individual characteristics, and there is no interaction between them and inefficient investment. Therefore, this study does not do too much about endogeneity.

4.3.2. Robustness test

In order to test whether the above conclusion is robust and reliable, the sample of explanatory variables is replaced in this paper. In this paper, the age difference of senior executives with the longest tenure and the tenure difference of senior officials with the oldest tenure are used as samples of explanatory variables. The study sample is 162 and multiple regression is conducted. The results are consistent with the above. In addition, some control variables are replaced in this paper, and the regression results are basically consistent with the previous ones, indicating that the research conclusions of this paper are robust and will not be presented due to space limitation.

5. Conclusion and discussion

5.1 Conclusion Analysis

This paper mainly adopts the empirical research method to study the relationship between the difference between the "old man" and the second generation in the family business and the inefficient investment, and draws the following conclusions.

The greater the age difference between the second generation and senior management elders, the lower the level of inefficiency investment after enterprise inheritance. Age difference is bigger, the second generation succession of younger, older executives, usually think young people are more adventurous, more imaginative, and have more experience, more adept at controlling risks for the elderly, in the face of all kinds of investment activities of cognitive difference is bigger, bring diverse ideas from different cognitive patterns and points of view, There is also a greater difference in the perception of the risks generated by investment activities, and the complementary performance of this perception and human capital mitigates the inefficient investment of firms. In addition, the second generation may not be able to make rational investment decisions due to their younger age and lack of experience. Senior executives and elders, due to their sufficient experience and rich social resources, can help the second generation to make reasonable investment decisions to a certain extent. As the saying goes, "the home has a old, if there is a treasure", under the influence of Chinese traditional culture, just to take over the second generation of older executives more respect, pay more attention to their proposal, executives in a take good care of the younger generation, will be more careful treatment of enterprise's investment decision-making behavior, the psychological interaction passed out through the company's business decisions, It has a positive effect on the investment efficiency of family enterprises after inheritance, and restrains the inefficiency investment of enterprises to a certain extent.

The greater the tenure difference between the second generation and senior executive elders, the lower the level of inefficient investment after enterprise inheritance. When the tenure of senior executives is longer than that of the second generation, the two sides have different degrees of cognition of the enterprise. This cognitive difference leads to different perceptions of risks that the external environment may bring to the enterprise by the second generation and senior executives. This difference in cognition of their own abilities will make their perception of external risks more sensitive and comprehensive. And as the growth of the executives qualifications, access to effective information ability, to meet the different market environment, executives in fully grasp the capital market investment signals effectively, can guide the investment strategy of successor, and by accumulating knowledge of key resources and network resources to help the company improve the efficiency of investment. At the same time, when the tenure of senior executives is longer than that of the second generation, the suggestions of senior executives are more likely to be listened to and adopted by the

second generation under the influence of informal authority, thus reducing the inefficient investment of enterprises.

The chairmanship of the second generation reinforces the negative relationship between the age difference of the second-generation senior executive and inefficient investment. This indicates that the age difference between the two groups is also subject to the intervention of formal power in the process of playing a role in inefficient investment. On the one hand, when the second generation becomes the chairman of the board, the formal identity and power can make the second generation have more rights to speak in the investment activities of the company and pay more attention to the risks brought by the actions, so it can alleviate the inefficient investment behavior after enterprise inheritance to a certain extent. At the same time, the power gap can make the second generation who just took over more confident, make them confidently show their leadership, and also create conditions for other senior executives to play their corresponding roles to a certain extent, so as to restrain the inefficient investment of the enterprise.

5.2 Research implications and prospects

During the succession period, not only the training of successors but also the assisting role of senior executives should be considered. In the existing research, we find that a large number of scholars focus on the succession training of family enterprises. This paper takes a different approach and focuses on the second generation embedded in the senior management team, which is influenced by some special executives in the team, thus influencing their investment decision making behavior. The research shows that there is a big age difference between the senior executives and the second generation, which will help the second generation to a certain extent. Similar to the elders of the three dynasties in ancient times, the existence of senior executives with a big tenure difference with the second generation can better assist the newly elected second generation, so as to alleviate the inefficient investment of enterprises. The research of this paper expands and enriches the theoretical research on the heterogeneity of senior management team and the inefficient investment of enterprises, and has the following contributions: First, this paper is based on the role of "old people" in senior executives at the special time point after the succession of the second generation of family enterprises. Since the composition of the senior management team has changed and the main investment decision makers have changed after the succession, the original and broad research may not be applicable in this special situation. Therefore, this paper analyzes from the perspective of family business inheritance, with a specific and unique entry point, which enriches the research in related fields. After the second, this study focus on the enterprise inheritance, executives in the special role of certain people's influence on enterprises, broke with the senior management team the shackles of the characteristics of the research enterprise and proven executives "old man" of the influence on the efficiency of investment, in a more detailed way solve inheritance relationship between TMT background features and corporate investment efficiency after the black box of the conduction process, It is expected to provide new research perspectives and ideas for the study of family business inheritance, and hope to have certain practical reference value for family business.

Although some valuable results have been obtained in this study, there are the following shortcomings: First, the scope of the research object is small. Only the oldest and longest-tenured extreme groups were selected in this paper. Future research could try to expand the study population. Second, this paper uses the empirical analysis method, and the subsequent research may use qualitative analysis method to do more in-depth research.

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