

Research on the Factors Influencing the Quality of Family Business Information Disclosure From the Perspective of Social Emotional Wealth Theory

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Abstract. Based on the theory of social emotional wealth, social emotional wealth is divided into two types: constraint type and extension type. Using the data of family businesses from 2015 to 2020, empirical research is conducted on the impact of two types of social emotional wealth on the quality of information disclosure. It also examines the moderating effect of institutional investor ownership and analyst concern on the relationship between emotional wealth and information disclosure quality in a constrained society, as well as the moderating effect of parental founder status and second generation experience length on the relationship between emotional wealth and information disclosure quality in an extended society. The findings are as follows: (1) Constrained social emotional wealth negatively affects the quality of information disclosure of family businesses; (2) Extended social emotional wealth has a positive impact on the quality of family business information disclosure; (3) The higher the shareholding ratio of institutional investors, the weaker the relationship between the constrained social emotional wealth and the quality of family business information disclosure; (4) Analysts focus on the relationship between the negative impact of social emotional wealth and corporate information disclosure; (5) The paternal founder status can positively affect the relationship between the extended social emotional wealth and the quality of information disclosure of family businesses. (6) The second generation experience did not positively affect the relationship between extended social emotional wealth and family business information disclosure.

1. Introduction

An important part of the capital market is information disclosure. According to the Measures for the Administration of Information Disclosure of Listed Companies, listed companies and relevant information disclosure obligors shall truthfully, accurately, completely and timely disclose information, and false records, misleading statements or major omissions are strictly prohibited. However, it is a pity that since the private enterprises were allowed to go public, many enterprises have been in violation of the relevant regulations in terms of information disclosure.

Since the reform and opening up, family businesses have become an important force that cannot be ignored in China's economic development. The blood relationship between family members enhances the cohesion between them, builds the enterprise together, and considers the overall interests of the family. Subsequently, when the family business achieved the level of listed company, the disadvantages of family business began to emerge. Because with the constant participation of outsiders, the control of family members over the enterprise has been eroded. Family members unite and do many acts that are not conducive to the

development of the family business, including information disclosure violations. However, there are still a few family businesses that haven't violated the rules of information disclosure for many years.

Therefore, based on the above background, this paper will discuss the following questions: what factors led to the frequent occurrence of family business information disclosure violations; Why do domestic family businesses have the phenomenon of two levels of differentiation of information disclosure violations.

With the development of China's capital market, the number of analysts has reached new highs. The research reports released by analysts are also rising year by year. In 2017, the coverage of analysts reached 82% again. On the whole, the influence of analysts is growing stronger and more dominant. In addition, since 2000, China's capital market has gradually emerged a large number of institutional investors, including trust, insurance, public funds, etc. Institutional investors have developed rapidly and played an important and non-negligible role in China's capital market in the next two decades. In 2020, institutional investors accounted for 29% of the total market value of circulation. Therefore, we must regard analysts' attention and institutional investors as important components of China's capital market, and discuss

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whether they can solve the violations of information disclosure quality of family businesses.

The existing research discusses the quality of information disclosure of family businesses from many different theoretical perspectives. For example, agency theory, housekeeper theory and family business loss aversion. In these different theoretical perspectives, scholars have different views on the quality of information disclosure of family businesses. In recent years, the theory of social emotional wealth has become an important theory to promote the study of family businesses. The reason is that it points out that family businesses not only focus on economic goals, but also on non economic goals, such as the degree of family control over the business and the degree of intergenerational inheritance^[1]. In addition, Miller divides social emotional wealth theory into constrained social emotional wealth theory and extended social emotional wealth theory. The former is not conducive to long-term development, while the latter is opposite^[2]. Berrone also proposed the FIBER model, which is divided into five dimensions: control and influence of family members; Family members' recognition of the enterprise; Binding social bonds; Emotional attachment; Inheritance from generation to generation^[3]. These two classifications have their own merits and shortcomings. Therefore, based on these two classifications, this paper proposes a new theoretical framework of social emotional wealth: first, the first type is the constrained social emotional wealth, which specifically includes family control and family identity, and the second type is the extended social emotional wealth, which specifically includes intergenerational inheritance, political and business relations, and social reputation. In addition, Zhu Hang^[4] proposed that the core of the constrained social emotional wealth theory is family control, while the core of the extended social emotional wealth theory is intergenerational inheritance. Therefore, this paper will calculate the value of social emotional wealth theory based on a higher weight.

As mentioned above, because of the core intergenerational inheritance of the extended social emotional wealth, both the inheritor and the inheritor are very important for the extended social emotional wealth. Most of the existing studies focus on the successors, that is, from the perspective of the second generation, to discuss the impact of intergenerational inheritance on the innovation investment of family businesses^[5], while ignoring the successors, that is, the influence of the parents on the intergenerational inheritance process of family businesses. Therefore, this paper uses the identity of the founder of the father generation to measure the propagator and the length of the second generation experience to measure the receiver, and discusses how they will affect the relationship between the extended social emotional wealth and the quality of information disclosure.

The theoretical significance of this paper lies in: First, this paper empirically studies whether the theoretical classification of social emotional wealth is feasible in the capital market; Secondly, it enriches the literature on the quality of family business information disclosure;

Thirdly, this paper enriches the literature on the relationship between analysts' concerns and institutional investors and the quality of information disclosure; Finally, this paper enriches the literature related to intergenerational inheritance.

The practical significance of this paper lies in: First, in order for the CSRC to effectively use the limited resources to focus on observing certain family businesses, stop their behaviors, find out the information disclosure violations of family businesses earlier, and prevent the information disclosure violations of family businesses from strongly affecting the stability of China's capital market and protecting the interests of investors; Secondly, it provides the basis for the CSRC to formulate relevant policies, help them punish illegal family businesses, and take effective measures to positively guide family businesses, so that the capital market is orderly; Finally, for external investors, it is beneficial for them to make more rational and correct judgments when making decisions, have a deeper understanding of the enterprise's operation and potential, and reduce their probability of making huge losses.

2. Research hypothesis

2.1. Restrained Social Emotional Wealth and the Quality of Enterprise Information Disclosure

we will put forward assumptions from the perspective of family control and family identity. First of all, the core of the constrained social emotional wealth is family control, including family control of the enterprise from the management and shareholders' meeting. According to the theory of social emotional wealth, compared with non-family members, family members in family enterprises tend to have stronger cohesion. In order to maintain social emotional wealth, they tend to sacrifice the interests of non-family members and minority shareholders to safeguard the interests of the whole family. Therefore, when the total ownership of family members is higher, family members have higher rent-seeking motives, and the degree of related party transactions is higher^[6]. In order to cover up the behavior of family members' encroachment on other stakeholders, and after weighing the possible losses and gains that may be caused by the punishment of the CSRC, they often resort to tricks on information disclosure to prevent small and medium-sized investors from discovering the hidden violations, so as to harm small and medium-sized investors, ensure the maximization of family interests, and thus reduce the quality of information disclosure. In addition, family businesses are more willing to choose family members as the management, so as to achieve family control over the business, which makes the managers who were not family members lose their positions. The actual controller of a family business usually arranges unreasonable incentive and restraint mechanisms to take care of the family members' managers in the business, resulting in lazy and free riding behaviors. Family member managers have a certain say in the company's business decisions, and they

are often united. Therefore, because of this loose regulatory mechanism, family member managers will privately do many things that are not conducive to the family business, such as private use of public funds and adverse selection. Therefore, in order to cover up these behaviors, there is more motivation to conduct earnings management and other operations.

Secondly, the family members of the family business came together at the beginning of entrepreneurship. In this process, family members have a strong identification with each other^[7]. Family identity will strengthen family members' psychological ownership of the enterprise. At this time, family members will be very disgusted with and reject the management and control of the enterprise by non-family talents, because if they do not do so, family enterprises will be gradually occupied by non-family members. In order to protect the family business from being occupied by outsiders, they will be united, and are likely to cheat on information disclosure to cover up their behavior against foreign investors, thus leading to poor information disclosure quality. In addition, family identity will lead to the rigidity of family business management, focusing only on existing businesses rather than developing new businesses, which will inevitably lead to the decline of family businesses one day in the future^[8]. As it is difficult to change the existing rigid business model and unwilling to recruit external managers, we can only manipulate information disclosure to give external investors the illusion that family businesses are still operating normally.

To sum up, hypothesis H1 is proposed: the constrained social emotional wealth negatively affects the quality of information disclosure of family businesses.

2.2 Extended social emotional wealth and information disclosure quality

According to the theory of social emotional wealth, the current actual controller of a family business has a strong motivation to hand over his or her business to his or her next generation, and some research shows that when the controlling shareholder values his or her business, the family controlling shareholder's valuation is far higher than that of the non family controlling shareholder, which reflects their extreme reluctance to hand over the business to members outside the family^[1]. Moreover, in combination with the actual situation in China, intergenerational inheritance is the core of social emotional wealth theory. In addition, the existing research shows that the contribution of intergenerational inheritance to the long-term value of enterprises is obvious to all. It can help enterprises gain reputation and obtain great value that may not be noticeable at present, but will be seen many years later^[9]. Therefore, the actual controller of the family business often has a longer investment vision and a stronger sense of social responsibility for the sake of the continuity of the business in the future years, which makes the family business have a good impression on the public and the government and is conducive to long-term development.

When enterprises are found out of earnings management operations and other information disclosure violations, it will lead to serious consequences such as increased risk of stock price collapse. Therefore, when the family business is in the intergenerational inheritance period, that is, when there is a strong inheritance intention, the family business will take its own image into account, so it will have a higher quality of information disclosure.

Even though China's private enterprises are thriving and developing at a high speed, the government still has the supreme right in resource allocation. Therefore, family businesses in China will still actively establish contact with the government, for example, by serving as a member of the CPPCC or a representative of the People's Congress at all levels, family businesses will be in a favorable position in resource allocation. A good social relationship has many advantages. First, a good political business relationship, as a substitute for a formal system, can effectively help family businesses protect intellectual property rights and ensure long-term investment returns; Secondly, family businesses with political and business relationships can accurately understand the policies and guidelines formulated by the government, quickly judge the development trend of future policies, and provide necessary information support for enterprise decision-making; Finally, a good political business relationship can help family businesses obtain financial support from banks and financial institutions, as well as tax relief and innovation subsidies from the government, thus reducing the financial constraints and operational risks faced by enterprises^[10]. Therefore, in order to maintain a good relationship with the government and obtain many benefits owned by the government, enterprises must establish their own good image in front of the government, such as honest information disclosure, in order to prevent information disclosure violations. When this good image collapses, the government may worry that it will no longer be willing to cooperate with it.

Family businesses are often seen as an extension and mirror image of the family, and their behavior and decisions also reflect the family's core values. Therefore, family members also pay special attention to maintaining the positive image and reputation of the family continuously. The existing research has shown that family businesses have a strong tendency to enhance their social reputation. The research of Zhu Lina^[11] shows that compared with non family enterprises, those enterprises controlled by families will be more active in charitable donations. Cheng Chen^[12] and others believe that family businesses perform their social responsibilities to a higher degree and more actively perform their social responsibilities to direct stakeholders. Dyer^[13] and others pointed out that long-term orientation will enable family businesses to actively establish a positive community image. Therefore, in order to protect their good image, enterprises will take the initiative to do a good job in information disclosure, in case the social reputation they have built will disappear in a short time.

To sum up, we propose hypothesis H2: extended social emotional wealth has a positive impact on the quality of family business information disclosure.

2.3 Constrained social emotional wealth, institutional investor shareholding and enterprise information disclosure quality

Although some studies have shown that institutional investors tend to hold shares for short-term benefits, which drives enterprise financialization and aggravates the instability of the securities market; However, most studies show that institutional investors' participation in corporate governance can enhance enterprise value, and reduce the internal and external information asymmetry and earnings management of enterprises by taking advantage of the inherent team advantages that external investors do not have and the information advantages that they have mastered through field research, so as to make the external information disclosure of enterprises more legal and compliant, thus reducing the phenomenon of corporate information disclosure violations^[14]. The main way of institutional investor governance is the combination of passive "foot voting" and active "hand voting" to keep the enterprise on track. "Voting with feet" can help institutional investors to spread the signal of family information disclosure violations to the society by selling shares when they find that family enterprises decide to use family control to infringe the interests of small and medium-sized shareholders and cannot change it^[15], damaging the interests of family members and social emotional wealth. "Voting by hand" can enable institutional investors to have a say in family businesses through their abundant funds and high shareholding ratio, intervene in family business operations, and solve the problem of lack of talents in family businesses, thus helping family businesses to get on track^[16] and make less mistakes in information disclosure violations.

To sum up, hypothesis H3 is proposed: the higher the shareholding ratio of institutional investors, the weaker the relationship between the constrained social emotional wealth and the quality of family business information disclosure.

Constrained social emotional wealth, analysts' concern and enterprise information disclosure quality

2.4 Constrained social emotional wealth, analysts' concern and enterprise information disclosure quality

Empirical research shows that analysts pay attention to the motivation and ability of supervisors, and they also have more opportunities to supervise the management of enterprises. They will investigate listed companies in various ways to build a bridge between external investors and enterprises, which is conducive to helping external investors to analyze enterprises, as well as timely finding management fraud^[17] and reducing earnings management level^[18]. As analysts focus on finding managers' opportunistic behaviors and other

illegal behaviors in the financial report, which will damage the reputation of the family business and is not conducive to attracting investment from external investors and further development of the family business, the family business has to fear analysts' attention, regulate its own behavior, constantly improve its own governance mechanism, and supervise its own internal senior managers, To achieve the purpose of preventing information disclosure violations, so as to improve the quality of information disclosure of family businesses.

To sum up, hypothesis H4 is proposed: analysts focus on the relationship between negative impact constrained social emotional wealth and corporate information disclosure.

2.5 Extended social emotional wealth, paternal founder status and enterprise information disclosure quality

First of all, the founders, who are regarded as the key figures of the enterprise, have shaped the mission, vision, strategy and structure of the enterprise, and they will still participate in the daily operation and decision-making of the enterprise to a certain extent. Therefore, with the growth and development of the enterprise organization, the founders have more and more profound and significant influence on the enterprise. Moreover, founders are often difficult to be replaced, because in addition to excellent entrepreneurial skills and a series of rare skills, they still have a high sense of identity and commitment to the enterprise, and have a fairly close personal relationship with employees. At this time, due to the profound influence of the founders on the enterprise and their unique characteristics, the transition between the founders and the next generation of leaders is often regarded as the most critical and chaotic stage. Therefore, in order to avoid the threats brought by the failure of intergenerational inheritance and new risks, parents tend to be more cautious to prevent fatal injuries, thus reducing the occurrence of information disclosure violations.

As the founders of the father generation play an important role in the family business, they must have a long time and in-depth contact and understanding with the government. They must also be supported by the surrounding communities because they have made great contributions to the community over the years. In order to prevent such a good political and business relationship from breaking, and do not want to lose the support and trust of the surrounding communities, enterprises must regulate their own behavior and do a good job of information disclosure.

To sum up, we propose hypothesis H5: the paternal founder status can positively affect the relationship between the extended social emotional wealth and the quality of information disclosure of family businesses.

2.6 Extended social emotional wealth, second generation experience length and enterprise information disclosure quality

Existing research has found that family members who grow up in the family business environment can easily establish the sense of identity and belonging required for future positions in the family business. If future generations can voluntarily join the family business as soon as possible, most of them can independently assume future responsibilities through the power of internal training. In addition, the second generation can gradually experience the hardships and painstaking efforts of their parents in the process of participating in the management, and experience the hard won good relationship between the government and community support and trust, so as to better understand their parents' feelings for the enterprise and the management behaviors they have taken. As a result, if the second generation has a long internal experience, it may have higher emotional commitment and organizational identity, a longer perspective, and focus on the reputation of the family business, so it is more unlikely to make earnings operations, information disclosure violations and other means to destroy the image established by the family business over the years.

To sum up, H6: the duration of the second generation experience positively affects the relationship between extended social emotional wealth and family business information disclosure.

3. Research design

3.1 Study sample selection and data source

According to the research needs, this paper selects the annual observation data of A-share family controlled listed companies in Shanghai and Shenzhen Stock Exchanges from 2015 to 2020 as the research sample. Referring to Anderson^[19] and Liu Bailu^[20], this paper defines an enterprise that meets the following two conditions as a family enterprise: (1) the founder of the enterprise or its family members are the ultimate controller of the enterprise; (2) The founders or their family members jointly hold more than 10% of the ultimate control of the enterprise. In order to enhance the comparability among samples, this paper screened the initial samples as follows: (1) ST and financial listed companies were excluded; (2) Eliminate insolvent companies; (3) Remove the sample with missing variable observation data. The extended social emotional wealth, constrained social emotional wealth, quality of information disclosure, institutional investor shareholding, analyst concern, second generation experience, paternal founder identity and other control variables used in this paper are the prospectuses and annual reports of family controlled listed companies collected by the author manually, and supplemented by Baidu and other online search tools. The enterprise diversification data used in this paper are from WIND

database, while the enterprise level financial data and corporate governance data are from CSMAR database.

3.2 Variable definition

3.2.1 Independent variable

Constrained social emotional wealth. X_1 is defined as two parts, family control and family identity. The measurement method of family control refers to the method of Anderson and Reeb^[21], combined with the research of other scholars^[22], and takes whether family members hold ownership and participate in corporate governance and management activities as the basis for defining family control. If yes, it is counted as 1, otherwise it is counted as 0. The measurement method of family identity refers to the practice of Shujiang^[23] and is measured by the time when the family controls the enterprise. This is because the family has a strong identity with the business, and as the family controls the business over time, the sense of identity has become increasingly strong. On this basis, 75% and 25% of the weight of family control and family identity are given respectively to obtain the constrained social emotional wealth.

constrained social emotional wealth= (family control/1) * 0.75+(family identity/sample maximum) * 0.25.

Extended social emotional wealth. Defined as X_2 . For intergenerational inheritance, this paper refers to Huang Haijie's research^[5] and defines the son, daughter, daughter-in-law and son-in-law of the founder of a family business as the second generation of the family. Among them, the value of the second generation entering the board of directors or senior management as chairman, CEO, supervisor or deputy general manager is 1, otherwise it is 0. For the political business relationship, this paper takes the political identity of family members as the measurement standard of political business relationship. If family members hold the posts of CPPCC members at all levels or deputies to the National People's Congress, it will be counted as 1, otherwise it will be counted as 0. As for social reputation, based on the practices of Xu Nianxing^[24] and others, this study uses the proportion of total charitable donations to total corporate assets to measure corporate charitable donations. On this basis, 50%, 25% and 25% weights are given to intergenerational inheritance, political and commercial relations and social reputation respectively.

extended social emotional wealth= (intergenerational inheritance/1) * 0.5+(political business relationship/1) * 0.25+(social reputation/maximum sample value) * 0.25.

3.2.2 Independent variable

Quality of information disclosure. Defined as Y . This paper selects the record of information disclosure violations of listed enterprises in Chint Database. The value is the number of information disclosure violations of enterprises in the current year and negative.

3.2.3 Moderator variable

Shares held by institutional investors. Defined as Z_1 . With reference to Li Wenjing and Lu Xiaoyan^[25], it is measured by the total shareholding ratio of all institutional investors in the company.

Analysts pay attention. Defined as Z_2 . This paper refers to the research of Li Chuntao et al.^[26], and uses the natural logarithm to measure the number of analysts who pay attention to specific listed companies within one year after adding one.

Father generation founder identity. Defined as Z_3 . In this study, referring to Deng Hao's^[27] measurement of this variable, the founder of the father generation is defined as: for a directly established family business, the founder of the father generation is the person who originally founded the business, while for a family business that was initially controlled by the state or a non natural person or a family, and later changed to a natural person or a family controlled by the family through restructuring or equity transfer, The founder of the father generation refers to the person who was responsible for the operation of the enterprise at the beginning of its establishment. Therefore, if the parent, the actual controller, meets these conditions, the value of the parent founder identity variable is 1, otherwise it is 0.

The training time of the second generation is long. Defined as Z_4 . With reference to the research of Zhu Xiaowen^[28] and others, when the training time of the second generation members in the enterprise is not less than the median of the sample, the variable value is 1, otherwise it is 0. Among them, the internal training duration of the second generation refers to the total length of time that the second generation worked in the family business before taking over as the general manager or chairman of the board of directors of the family business.

3.2.4 Control variable

There are many factors that affect the quality of information disclosure. In order to control the influence of these factors, this paper refers to previous studies and adds the following control variables to the regression model: first, the enterprise level, including company size (C_1), return on total assets (C_2), asset liability ratio (C_3), and board size (C_4); At the same time, the control variables of the external environment are added, including industry (C_5), institutional environment (C_6), and government subsidies (C_7).

4. Empirical analysis

4.1 Descriptive statistics

In this paper, 71938 pieces of valid data have been collected. Next, descriptive statistical analysis will be conducted on the independent variables, dependent variables and regulatory variables in the study, as shown in Fig. 1 below.

The maximum value of the information disclosure quality of the dependent variable is 15, the minimum value is 0, while the average value is 3.1, and the standard deviation is 13.41, indicating that the information disclosure quality of different family businesses is uneven. From the perspective of independent variables, the maximum value of extended social emotional wealth is 0.94, the minimum value is 0.04, the average value is 0.56, and the standard deviation is 1.23; The maximum value of emotional wealth in a constrained society is 0.92, the minimum value is 0.08, the average value is 0.78, and the standard deviation is 1.43. This shows that most family businesses are willing to let family members enter the business and have a strong sense of identity among family members. From the perspective of regulatory variables, the maximum value of institutional investors is 61.23%, the minimum value is 12.74%, the average value is 40.1%, and the standard deviation is 21.19; The maximum value of analyst concern is 6, the minimum value is 1, the average value is 2.64, and the standard deviation is 8.46; The maximum value of paternity founder identity is 1, the minimum value is 0, the average value is 0.63, and the standard deviation is 2.63; The maximum value of the second generation training duration is 1, the minimum value is 0, the average value is 0.5, and the standard deviation is 0.5.

In general, family control exists widely. The actual controller of family business is very willing to let family members join the family business, and the quality of information disclosure of different family businesses is uneven.

Variable Name	Average	Deviation	Maximum	Minimum
Constrained social emotional wealth	0.78	1.43	0.92	0.08
Extended social emotional wealth	0.83	1.23	0.94	0.04
Quality of information disclosure	3.1	13.41	15	0
Shares held by institutional investors	40.1%	21.19	61.23%	12.74%
Analysts' attention	2.64	8.46	6	1
Father generation founder identity	0.63	2.67	1	0
Training duration of the second generation	0.5	0.5	1	0
company size	21.666	1.008	26.191	18.961
Total asset income	0.055	0.099	0.526	-4.946
Asset liability ratio	0.342	0.181	3.919	0.019
Board size	9.88	0.742	12	5
Government subsidies	2.782	0.252	7.441	0

***p<0.01,**p<0.05,*p<0.1

Fig. 1 Descriptive statistics

4.2 Regression analysis

Because the dependent variable in this paper is discrete data, poisson counting model is used for regression; In addition, this paper uses non-equilibrium surface data, and conducts Hausman test before regression analysis. According to the results obtained, this paper uses the fixed effect model to fix the year in the process of regression analysis.

The regression results of model 1 in Fig. 2 show that there is a significant negative correlation between the constrained social emotional wealth (X_1) and the quality of information disclosure, indicating that the more family businesses attach importance to the constrained social emotional wealth, the worse the quality of information disclosure will be. The results obtained support hypothesis 1. The regression results of model 2 show that there is a significant positive correlation between the extended social emotional wealth (X_2) and the quality of information disclosure, indicating that the more family businesses attach importance to the extended social emotional wealth, the better the quality of information disclosure will be. Therefore, the results obtained support hypothesis 2. There is a significant relationship between the constrained social emotional wealth and institutional investors ($X_1 * Z_1$) in model 3 and the quality of information disclosure, indicating that institutional investors have a moderating effect on the constrained social emotional wealth and institutional investors. Hypothesis 3 is supported. There is a significant relationship between the constrained social emotional wealth of Model 4 and the cross multiplication term ($X_1 * Z_2$) that analysts pay attention to and the quality of information disclosure, which indicates that analysts' attention has a moderating effect on the constrained social emotional wealth and the quality of information disclosure, and Hypothesis 4 is supported. The cross multiplication term ($X_2 * Z_3$) of the extended social emotional wealth and the identity of the founder of the father generation in Model 5 has a significant relationship with the quality of information disclosure, which shows that the identity of the founder of the father generation has a moderating effect on the extended social emotional wealth and the quality of information disclosure, and Hypothesis 5 is supported. There is no significant relationship between the extended social emotional wealth of Model 6 and the cross multiplying term ($X_2 * Z_4$) of the second generation experience duration and the quality of information disclosure, which indicates that institutional investors have no moderating effect on the constrained social emotional wealth and the quality of information disclosure, and Hypothesis 6 is not supported.

	Model1	Model2	Model3	Model4	Model5	Model6
X_1	-0.149*** -2.469					
Z_1		0.050** -1.973				
Z_2			0.043** -1.774			
$X_1 * Z_1$		0.137*** -0.944				
$X_1 * Z_2$			0.293*** -1.052			
X_2				0.197*** -2.479		
Z_3					0.073** -1.431	
Z_4						0.083** -0.948
$X_2 * Z_3$					0.174** -1.442	
$X_2 * Z_4$						0.001 -1.491

***p<0.01, **p<0.05, *p<0.1

Fig. 2 results Regression analysis

4.3 Robustness check

In order to further test the accuracy of the conclusions in this paper, this paper uses the actual controller's control right and the separation of two rights as the proxy variable of the constrained emotional wealth for testing, which is represented by X_3 , and uses the second-generation shares as the proxy variable of the extended social emotional wealth for testing, which is represented by X_4 .

The regression results of model 1 in Fig. 3 show that there is a significant negative correlation between the constrained social emotional wealth and the quality of information disclosure, and the results support hypothesis 1 again. The regression results of model 2 show that there is a significant positive correlation between the extended social emotional wealth and the quality of information disclosure. Therefore, the results obtained support hypothesis 2 again. There is a significant relationship between the constrained social emotional wealth of model 3 and the cross product of institutional investors and the quality of information disclosure, which shows that institutional investors have a regulatory effect on the constrained social emotional wealth and institutional investors. Hypothesis 3 is again supported. There is a significant relationship between the constrained social emotional wealth and the cross-multiplying items that analysts pay attention to in Model 4 and the quality of information disclosure, which indicates that analysts' attention has a moderating effect on the constrained social emotional wealth and the quality of information disclosure. Hypothesis 4 is again supported. The multiplicative term of the extended social emotional wealth and the paternal founder's identity in Model 5 has a significant relationship with the quality of information disclosure, indicating that the paternal founder's identity has a moderating effect on the extended social emotional wealth and the quality of information disclosure. Hypothesis 5 is again supported. There is no significant relationship between the extended social emotional wealth and the second generation experience duration of model 6 and the quality of information disclosure, indicating that institutional investors have no regulatory effect on the constrained social emotional wealth and the quality of information disclosure. Hypothesis 6 is again not supported.

	Model1	Model2	Model3	Model4	Model5	Model6
X3	-0.193*** -1.036					
Z1		0.050** 1.236				
Z2			0.043** 1.975			
X3*Z1		0.195*** 2.961				
X3*Z2			0.287*** 2.941			
X4				0.197*** 1.438		
Z3					0.073** 0.957	
Z4						0.083** 1.932
X4*Z3					0.136*** 1.664	
X4*Z4						0.001 1.720

***p<0.01, **p<0.05, *p<0.1
Fig. 3 Robustness check results

5. Conclusion

This paper draws the following conclusions: First, the constrained social emotional wealth negatively affects the quality of information disclosure of family businesses; Second, the extended social emotional wealth has a positive impact on the quality of family business information disclosure; Third, the higher the shareholding ratio of institutional investors, the weaker the relationship between constrained social emotional wealth and the quality of family business information disclosure; Fourth, analysts focus on the relationship between the negative impact of social emotional wealth and corporate information disclosure; Fifthly, the paternal founder status can positively affect the relationship between the extended social emotional wealth and the quality of information disclosure of family businesses; Sixthly, the length of the second generation experience has not positively affected the relationship between the extended social emotional wealth and the information disclosure of family businesses.

According to the conclusion, this paper summarizes many policy implications. First, family businesses that pursue constrained emotional wealth should properly control their control over family businesses, so as to better realize the quality of information disclosure. According to the conclusion of this paper, when the family business pursues the constrained social emotional wealth, it is more likely to damage the interests of non-family members, and use information disclosure to cover up bad behavior to ensure the benefits of family members. If family businesses are less constrained in pursuit of social emotional wealth, their actions will be more transparent and can better ensure the quality of information disclosure, which is conducive to the development of China's capital market. Second, we should encourage families to pursue more extended social emotional wealth, and increase their motivation to pass on the enterprise to the next generation. According to the conclusion of this article, we should let family businesses know that if they disclose information more

frequently, they will be severely punished, which is not conducive to them firmly holding the family business in their own hands. Third, encourage institutional investors to invest in family businesses. This paper has proved that institutional investors have many ways to govern family businesses. The more institutional investors, the less impact of constrained emotional wealth on the quality of information disclosure. Therefore, we should try our best to encourage institutional investors to invest in family businesses, whether through policy subsidies or publicity, which will be conducive to the development of the capital market and reduce violations of information disclosure. Fourth, improve the analyst focus system. In practice, we should improve the governance mechanism of analysts, increase the frequency of analysts' inspection of family businesses, so that family businesses are afraid, so as to prevent information disclosure violations in family businesses. Fifth, in the process of intergenerational inheritance of family enterprises, if the predecessor of the transition person is the founder of the enterprise, the CSRC need not pay too much attention. If the predecessor of the transition person is not the founder, the CSRC should pay more attention to such enterprises that are likely to have information disclosure violations. As for the training duration of the second generation, the CSRC does not need to worry too much, because the empirical analysis in this paper shows that the training duration of the second generation has little impact on the quality of family business information disclosure.

This paper has the following shortcomings: First of all, the questionnaire may be a better choice for measuring the emotional wealth of the extended society. But it is difficult to contact, so this paper uses secondary data as the measurement method. Secondly, this paper only focuses on listed family businesses, while for non-listed family businesses, the data is difficult to obtain, so it is not the scope of this paper, so for those small family businesses, the above conclusions may not be applicable.

Based on the deficiencies, this paper proposes the following aspects for future research: First of all, in the future measurement of extended wealth, their willingness to pass on the enterprise to the second generation can be measured in the form of questionnaires, which can be more accurately measured from the subjective level of the actual controller of the family business. Secondly, future research can pay more attention to unlisted family businesses and establish a database of unlisted family businesses. After all, unlisted family businesses still account for the majority, and they still have a very big influence on China's capital market.

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