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## Article

# The Influence of Family Governance on the Value of Chinese Family Businesses: Signal Transmission Effect of Financial Performance

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**Abstract:** The phenomenon of family governance in Chinese family businesses may not only signal a high second-party agency cost that infringes on the interests of small and medium shareholders, but it may also signal this as a stable governance structure. Based on the theory of signal transmission, this paper studies the degree of influence of Chinese family governance on the corporate value of Chinese family businesses and the signaling role played by corporate financial performance in this process. This paper also analyzes a sample of Chinese A-share listed family businesses from 2011 to 2020. The results show that the family governance of Chinese family enterprises can promote the improvement of enterprise value, because operating capacity, solvency, profitability, and development capacity can improve the credibility of family governance signals.

**Keywords:** family governance; signal transmission theory; integration of ownership and control; firm value; financial performance



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## 1. Introduction

Family business governance is an important issue for the sustainable development of economies worldwide due to its economic contribution (Ahn et al. 2021). Family governance in Chinese family businesses signals two issues: a high second-party agency cost incurred by small and medium shareholders and an indication that this governance structure is stable. As a long-standing organizational form, Chinese family businesses have played an indelible role in China's social and economic development (Li et al. 2017). After nearly 160 years of development, Chinese family businesses have experienced three historical periods of formation, development, and recovery from stagnation (Xie 2015). These organizations play a central role in job creation, local development, long-term knowledge transfer, and territorial cohesion (Costa 2020). Chinese family businesses are characterized by a high concentration of equity and the integration of ownership and management rights; this phenomenon is easy to convey to investors through such signals as "centralized family power" and "stable financial performance". More specifically, Chinese managers of family businesses maintain a "family rationality" that often bases the business objectives of these enterprises on family interests, and families are more willing to sacrifice business development to maintain family control (Ye et al. 2016). The willingness of inheritance makes Chinese family businesses more inclined to follow a low-risk governance model in formulating their business strategies to protect their family's wealth, thus making the value of the company less volatile.

Family business can be divided into three elements, ownership, control, and management, which can have positive or negative consequences for the company (Wahyudi et al. 2021). The family business governance model refers to the integration of ownership and control. This model has played an important directional role in the development of Chinese family businesses. Over time, the governance model has become the signal that investors pay more attention to when making their investment decisions. As a person external to

an enterprise, investors cannot directly obtain the governance information related to that enterprise, thus causing the problem of information asymmetry: How can the efficiency of the governance model of the family business be accurately assessed? This has become an urgent problem for investors. Although both family enterprises and some non-family enterprises have a governance model of the integration of ownership and control, because most of the internal managers of family enterprises are family personnel, they can influence business strategies both as shareholders and through their governance involvement (Leopizzi et al. 2021), and their business ideas and strategic objectives will be different from those of non-family enterprises, so the role of the governance model in the incentive effect of the enterprise value is also different. Therefore, when discussing the effect of the corporate governance model, it is necessary to study family enterprises separately.

In the previous literature, there have been few interpretations of the relationship between the family business governance model and corporate value. Based on the theory of signal transmission, this paper uses a group of A-share listed family businesses as an example to study the effect of the family governance of this business on the value of the enterprise from the perspective of investors. It finds that the financial performance of the company plays a signaling role when Chinese investors are evaluating the governance model. It also puts forward targeted suggestions and opinions at the levels of theory and measurements.

The purpose of this paper is to introduce financial performance as a signal to investors on the basis of clarifying the impact of the family business governance model on the corporate value of a business, so as to provide investors with a more accurate way to evaluate the governance efficiency of family business governance model. The contributions of the paper are as follows. First, the paper introduces the theory of signal transmission into the research field of the family business model and expands the scope of the interpretation of signal transmission theory. Second, this paper studies the signal effects of the integration of ownership and control governance model, which enriches the research on the effect of the family business governance model. Third, it also finds the signaling role played by corporate financial performance in the investors' evaluation of the family governance of family businesses, so that investors can reduce the information asymmetry problems they encounter through the signals of corporate financial performance.

The structure of the paper is as follows: in the first part, the paper introduces the research background and the current situation of relevant concepts, and then expounds the research purpose and research contribution of the article. In the second part, the paper first defines the research variables, then expounds the relevant research theories, and finally, puts forward the hypothesis of the paper according to the relevant literature. In the third part, the paper first introduces the data used in the research, then expounds the measurement methods of each variable, and finally, establishes the corresponding model according to the proposed hypothesis. The fourth part is the empirical part of the article. In the fifth part, the paper first summarizes the conclusions drawn according to the empirical part, compares them with the research of other scholars, then expounds the shortcomings of the paper and the direction of further research, and finally, puts forward policy recommendations.

## 2. Theoretical Analysis and Research Hypotheses

Corporate governance impacts corporate value. A high level of corporate governance can protect the rights of investors and enable the use of financial performance as a signal to convey the message of good corporate governance structure to investors, so as to attract investors. This section defines the research variables used in this research, then details the theories used in this research, and finally, puts forward assumptions on the basis of the theory.

## 2.1. Concept Definition

### 2.1.1. Family Business

A family business study needs to adopt a single general criterion. This would ensure that the concept used in the different studies of these companies does not condition the results obtained (Cano-Rubio et al. 2017). Chua et al. (1999) and Rovelli et al. (2021) state that family businesses are controlled or managed by one or more individuals of the same family. While controlling and managing their company, the family constantly projects its vision and intentions into their company and establishes a corporate empire. A family business, in this paper, is referred to as one in which the ultimate controlling shareholder of the company can be traced back to a person or a family. At the same time, the person or controlling family, as the ultimate controlling shareholder, has an actual controller, and at least one family member is related to the actual controller and has a high-level position in the company. This paper defines a family enterprise as meeting two conditions: the actual controller of the enterprise is a family member, and at least one or more individuals among the same family are employed in the enterprise.

### 2.1.2. Family Governance

Family governance refers to the unification of ownership and control, which is caused by the nature of the family business (Gu et al. 2017). This paper defines family governance as the integration of ownership and control. The family governance model can have advantages such as cost savings and reduced decision-making risks for the operation of the enterprise. Meanwhile, the integration of ownership and control can avoid the risks brought by professional managers and save agency costs, so that family enterprises can maintain their strong competitiveness.

### 2.1.3. Financial Performance

Financial performance, which is the focus of this paper, is the result of performing financial activity. It is the level of influence that enterprises have on their business development in their daily activities and whether they can improve their operations (Ye et al. 2016), and it reflects the company's operating results and financial status evaluation standards within a specific accounting period through its financial statements. Financial performance is a measure of the results of a firm's policies and operations in monetary terms (Fali et al. 2020). Its results are reflected in the firm's return on investment, return on assets, and return on equity and value added (Gatuhu 2013), whereas various researchers classify financial performance according to the timeliness of the impact of financial performance on the company. It includes short- and long-term financial performance. Short-term financial performance can be divided into three aspects: profitability, debt-servicing capacity, and operating capacity. Long-term financial performance includes development capacity. The development capacity mentioned here refers to the potential for continuous accumulation, expansion, and redevelopment through enterprise production and operation.

### 2.1.4. Enterprise Value

Zhao et al. (2008) pointed out that corporate value refers to the book value shown in financial statements and includes corporate reputation value, shareholder value, and brand value. It generally reflects an enterprise's ability to give all corporate stakeholders (including shareholders, creditors, managerial staff, common employees, and government) satisfying returns under value-centered management and rule of law. Enterprise value can be measured by the value of the market share price based on the formation of stock prices in the market, reflecting the public's assessment of actual company performance. In current research related to enterprise value, Tobin's Q and ROA are generally used as measurements. For enterprises operating in the stock market, it seems natural to use Tobin's Q. Tobin's Q is an element in the measurement and estimation of the enterprise value. It refers to the ratio of enterprise market value to its asset replacement cost and reflects the specific value of two different value assessments of one enterprise. The numerator is the market value on

the financial market, whereas the denominator is the “basic value”—the replacement cost of an enterprise. Thus, this study selects Tobin’s Q to reflect enterprise value.

## 2.2. Conceptual Framework

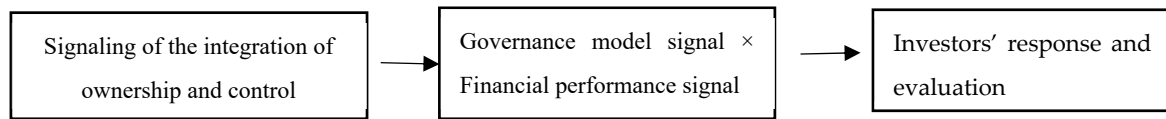
Gu et al. (2017), Zellweger et al. (2012), and Ni and Wang (2005) pointed out the impact on the enterprise value of a family-owned enterprise’s family governance. The integration of ownership and control governance model is of positive significance to the growth of market value of family enterprises. When investors understand corporate governance characteristics through the information in the capital market, they will make reasonable investment decisions according to this judgment. However, because investors cannot directly obtain governance information from within an enterprise, it is difficult to judge the actual impact of the governance model.

This paper studies how investors should reduce the problem of signal validity caused by information asymmetry and, thereby, more effectively evaluate the intrinsic value of family business governance models.

Signals, signal senders, and signal receivers are the three main components of signal transmission theory (Connelly et al. 2011). In this paper, the signal refers to the governance model signal sent by the enterprise, the signal sender refers to the enterprise that issues the governance model signal, and the signal receiver refers to the investor of the enterprise. In the process of signal transmission, the information sent by the sender and the signal received by the receiver will be different. The focus of signal transmission theory is how to reduce this information asymmetry between the sender and receiver (Spence 1978).

In the process of signal transmission of family enterprises, the existence of information asymmetry will make the signals generated by the corporate governance model unable to be completely mastered by the corporate investors, and the corporate investors cannot judge the efficiency of the enterprise value according to the corporate governance model. The theory of signal transmission asserts that the key to reducing the problem of information asymmetry is the receiver of the signal judging the effectiveness of the family business governance model based on other signals that it can observe (Li et al. 2016). Furthermore, Zingales (2015) found that the choice of the family business governance model and changes in corporate value are closely related to internal financial performance. Family governance forms a Chinese-style family business management model, and this model has a positive and significant impact on the financial performance of the family business. Only with a good financial performance can the application of the family governance of family businesses be effective and contribute more to the improvement of the enterprise’s value.

The level of financial performance plays a decisive role in judging whether a family’s governance is effectively applied to its family businesses. Therefore, in order to judge whether the Chinese family business governance model is effectively applied in a family business, financial performance can be used as a signal to measure the quality of the family business governance model, providing a more direct way for business investors to judge the effectiveness of the family business governance model. The operational, debt-servicing, profitability, and development capabilities of an enterprise are the four indicators for measuring financial performance. This paper uses these four indicators to represent the financial performance level of an enterprise. Conducting this analysis according to the theory of information asymmetry, this paper asserts that investors can use the level of financial performance to measure the effect of family-owned governance on the value of a family-owned enterprise. Specifically, when investors receive inaccurate signals, they will quickly look at corporate-related financial signals to resolve this information asymmetry. Subsequently, according to the financial signals found, investors will interact with the governance model’s signals to determine what effect the company’s governance might have on the change in corporate value. Investors have to evaluate the credibility of the information received and, finally, react (Spence 1978). The specific process is shown in Figure 1. From Figure 1, We can clearly understand the transmission path of governance model as a signal in the family business.



**Figure 1.** Flow chart of signal transmission.

### 2.3. Research Hypotheses

#### 2.3.1. Family Governance and Corporate Value

For family enterprises, the impact of the governance model of the integration of ownership and control on enterprise value can be divided into two categories.

The first is the support effect. The governance model combining ownership and control of family enterprises makes more family members become managers, and the management of family members can help the company make correct decisions, improve decision efficiency, and reduce sunk costs (Gallucci et al. 2020); at the same time, because family executives will formulate more robust corporate strategies and obtain long run stock returns (Villalonga and Amit 2006; Miller et al. 2014; Chemmanur et al. 2020), the governance model combining ownership and control promotes the improvement of corporate value and supports family enterprises (Davis and Harveston 2001; Fan et al. 2017). However, some studies show that the integration of ownership and control governance model will make it difficult for enterprises to implement management policies, thus hindering the development of enterprises (Yao 2019).

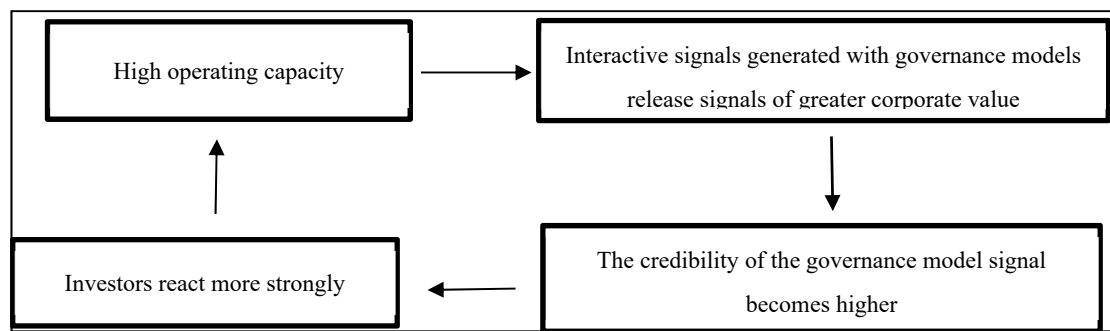
Based on these findings, this paper suggests that the governance model of a family business with two powers will send a signal to investors about the future growth of the corporate value and cause investors to have a positive response to this signal. This paper proposes as Hypothesis 1:

**Hypothesis 1 (H1).** *In family business, the integration of ownership and control governance model promotes the enhancement of the corporate value of a business.*

#### 2.3.2. The Signaling Role of a Company's Operating Capacity

The smooth operation of an enterprise depends on its internal management (Chen et al. 2020). Operation capability is the main index used to measure the internal management level of an enterprise. Stable business ability enables family enterprises to better adapt to the changes of the market environment in their daily business activities and make changes in time, so as to stabilize their market share and ensure enterprise value. In family business, the integration of ownership and control governance model can promote the improvement of operation ability. Therefore, this paper proposes using the operating ability as another signal for investors to judge the credibility of the governance model of the integration of ownership and control.

Different operating capabilities cause investors to respond differently to the credibility of the governance model. When the operating capacity of an enterprise is strong, the interactive signal generated by its operating capacity and its governance model releases signals to investors that the enterprise effect is improving and the enterprise value is increasing, making the governance model signal more credible. Investors will also have a stronger reaction, as the specific process shows in Figure 2. As a result, the operating capacity signal will positively affect the investors' responses to the family governance. This paper now proposes Hypothesis 2:



**Figure 2.** Flow chart of operational capability signal transmission.

**Hypothesis 2 (H2).** *Operating capacity information can positively regulate investors' response to family governance.*

### 2.3.3. The Signaling Role of the Company's Solvency

Croci et al. (2011) pointed out that solvency refers to whether an enterprise can use its existing assets to repay its corporate debts. The improvement of solvency can enable enterprises to repay realized liabilities in the short term and enable enterprises to bear short-term financial risks. Its reasonable allocation can reduce financing costs, play a regulatory role of financial leverage, and promote the maximization of enterprise value. There is a close relationship between the solvency of enterprises and their stakeholders (such as creditors and investors). In order to prevent enterprises from reducing their business activities due to excessive debt, resulting in a reduction in the return on investment of investors, investors pay special attention to the solvency of the company.

In family business, the integration of ownership and control causes family managers to control the enterprise by affecting the debt structure. In other words, this family governance model can promote the improvement of solvency in family businesses. Managers are more willing to keep consistent behavior with investors, and the solvency of the company can also maintain stability. When the family governance signal interacts with the high solvency signal, investors believe that the solvency of enterprises is relatively stable. This ensures the normal operation of the enterprise and promotes the economic development of the enterprise with more funds. Therefore, family governance forms a virtuous circle to maintain the sustainable development of enterprises, and this sends a signal to external potential investors that the enterprise value has improved. The specific process is similar to that shown in Figure 2. Therefore, releasing the signal of high solvency to investors enhances the positive response of investors to the governance model signal of the integration of ownership and control. Based on these findings, this paper proposes hypothesis 3:

**Hypothesis 3 (H3).** *Debt solvency information can positively regulate investors' response to family governance.*

### 2.3.4. The Signaling Role of Corporate Profitability

Xu et al. (2019) pointed out that profitability refers to the economic benefits obtained by enterprises from their investment assets. It can specifically optimize the asset structure, adjust the turnover rate of various assets, and speed up the capital turnover rate. The improvement of profitability ensures the solvency of enterprises, promotes the creation of economic added value, and is the driving force of enterprise value growth. The proportion of corporate profitability is positively related to its value. Only companies with strong profitability can create value for investors through continuous business activities. In family businesses, the governance model of combining ownership and control makes the equity highly concentrated. In order to ensure the continuity of family business assets, managers will spare no effort to improve resource investment efficiency, improve profitability, and ensure that the enterprise value is not damaged (Xu 2020).

In family businesses, the integration of ownership and control governance model can promote the improvement of profitability; investors will have different responses to the credibility of the governance model signal. When the model sends a signal and interacts with the high profit signal, it means that investors have a higher view of the company's business forecast, and the company can continue to obtain greater profits and improve its value. This interactive signal also supports the credibility of the governance model signal, which makes investors have a stronger positive response to the governance model signal. The specific process is similar to Figure 1. Therefore, the profitability signal can positively affect investors' response to the integrated governance model of ownership and control. Based on this finding, we propose Hypothesis 4:

**Hypothesis 4 (H4).** *Profitability information can positively regulate investors' response to family governance.*

### 2.3.5. The Signaling Role of Enterprise Development Capability

The development capacity of enterprises is to continuously accumulate, expand, and reproduce development potential through enterprise production and operation. With the change of the external environment, enterprises have the development ability to adapt to it, so as to obtain a sustainable competitive advantage in the turbulent environment. [Xu et al. \(2019\)](#) found that, for family businesses, their company's development ability directly determines whether they can develop and progress steadily. If the development ability is poor, the future development path of the company will be uncertain. In contrast, if the development ability is good, the company's future development process is full of power, and the company's investors attach great importance to this index.

In family enterprises, the governance model of the integration of ownership and control makes the interests of the whole family more consistent, and the problem of strategic conflict is alleviated, so as to improve the corporate governance conducive to the stable development of enterprises. In other words, the integration of ownership and control family governance model can promote the improvement of development ability. A high development capability will make the governance model more effective in enterprise operation. Therefore, the development capability and governance model can be matched in the company's strategy. Based on different development capabilities, investors form different evaluations on the credibility of governance model signals. We believe that development capacity is a signal for investors to judge the credibility of the governance model. When the signal of the governance model matches the signal of high development capability, the governance model provides a better foundation for the future development of the enterprise and produces a stronger positive response. The specific process is similar to Figure 2. Therefore, the development capability signal can positively affect investors' response to the integrated governance model of ownership and control. Therefore, we propose Hypothesis 5:

**Hypothesis 5 (H5).** *Development capacity information can positively regulate investors' response to family governance.*

## 3. Research Design

### 3.1. Sample Selection

This paper selected 2011–2020 A-share listed family companies as the research sample and constructed a fixed effects regression model for empirical analysis. Among the research sample, 43% of the sample belonged to the manufacturing industry, 29% of the sample belonged to the construction industry, 11% of the sample belonged to the science and technology industry, 8% of the sample belonged to agriculture, and finally, some of the sample belonged to the wholesale industry and catering industry. In order to make the research sample more accurately reflect the characteristics of "family", we conducted a second screening of the research sample under the following conditions: the family



enterprise was a holding company when it was listed. In addition to the actual controller, at least one manager is a family member, and the family members can manage and control the listed company or become the controlling shareholder. The family business and financial data in this paper came from the family business database of CSMAR (China Stock Market Accounting Research), and the data were processed as follows: first, we excluded financial companies; second, we excluded ST and \*ST companies (“ST” is the abbreviation of “Special Treatment”, indicating that the stock had an investment risk; “\*ST” indicates that the stock had a delisting risk); third, we eliminated companies with missing data. In total, 632 enterprises were retained, with 44,271 valid observations. Relevant variables were treated with Winsorize at the level of 1% and 99%.

### 3.2. Variable Selection

#### 3.2.1. Dependent Variable

Enterprise value (TQ) was the dependent variable. To distinguish it from the firm’s value used in the robustness test, this research used TQ to represent the enterprise value.

$$TQ = \text{company market value} / \text{total assets}$$

#### 3.2.2. Independent Variables

In this research, dummy variables were used to measure the dual governance model (DUAL). When family members had the positions of chairman and general manager in the enterprise, the governance model of the enterprise was considered to be the integration of ownership and control: DUAL was assigned a value of 1, and in other cases, DUAL was counted as 0.

#### 3.2.3. Moderator Variables

To test the signaling role played by corporate financial performance when investors evaluate the integration of ownership and control governance model, this research used four adjustment variables that measure financial performance: operating ability (TURNTA), debt-servicing ability (LEV), profitability (ROA), and development capacity (TAGR). Specifically, research used total asset turnover to measure operating capacity, asset-liability ratio to measure debt-servicing ability, asset return to measure profitability, and an innovation variable to measure development capacity.

#### 3.2.4. Control Variables

Following the methods of [Amore et al. \(2017\)](#), [Xie et al. \(2019\)](#), and [Mai and Hamid \(2021\)](#), the research selected company size (Size), family control age (AGE), equity concentration degree (SHRZ), family founder age (FA), and family managers number (FN) as control variables. The reason for these selections is as follows: First, the size of the company will affect the judgment of Chinese investors on the value of the company in order to better measure the impact of the integration of ownership and control governance model on the value of the company. This paper chose the size of the company as the control variable. Second, the control time of the Chinese family business controller over the enterprise will affect the impact of the governance model on the value of the enterprise; that is to say, when the family controller has a relatively short period of actual control over the enterprise, the impact of the integration of ownership and control governance model on the value of the enterprise will also be small. Therefore, this article chooses the family control age as the control variable.

Finally, the degree of equity checks and balances, the age of the family business founders, and the number of family managers will also have an impact on the governance effect of the integration of ownership and control governance model of Chinese family enterprises. Therefore, in order to reduce this impact, this paper selected the degree of equity checks and balances, the age of the family business founders, and the number of family managers as control variables. In addition, this paper also added industry (Ind)

and year (Year) dummy variables for control. The definition and measurement methods of specific variables are shown in Table 1.

**Table 1.** Variable measurement table.

	Variable Name	Measure
Independent variable	DUAL	DUAL was assigned a value of 1, and in other cases, DUAL was counted as 0.
Dependent variable	TQ	Company market value/total assets
Moderator	Operating Capability (TURNTA)	Sales revenue/total assets
	Solvency (LEV)	Total liabilities/total assets
	Profitability (ROA)	Earnings Before Interest and Tax/total assets
	Development capacity (TAGR)	R&D/total assets
Control variable	Firm size (Size)	ln (total assets at the end of the period)
	Family age control (AGE)	Statistics of the current year—the year of family control
	Equity check and balance (SHRZ)	Total shareholding ratio of the second–fifth largest shareholder/shareholding ratio of the largest shareholder
	Age of family founders (FA)	Actual founder age of the family
	Number of family managers (FN)	Number of family members serving as managers in family businesses
	Industry (Ind)	The industry classification in the “Guidelines for Industry Classification of Listed Companies” issued by the CSRC
	Year (year)	Statistics of the current year

### 3.3. Model Setting

Based on the variables in Table 1, the fixed effect model 1 was constructed to study the impact of the family business governance model on its corporate value. Then, four measurement indicators of financial performance were introduced to construct Model 2–Model 5 by setting interactive items to observe the signaling effect of financial performance.

To study the relationship between family governance and firm value in family business, therefore, we established Model 1:

$$\text{Model 1: } TQ_{i,t} = \alpha_0 + \alpha_1 DUAL_{i,t} + \alpha_2 Size_{i,t} + \alpha_3 AGE_{i,t} + \alpha_4 SHRZ_{i,t} + \alpha_5 FA_{i,t} + \beta_6 FN_{i,t} + \sum ind + \sum yr + \gamma$$

To test the signaling effect of financial performance, we built Models 2 through 5:

$$\text{Model 2: } TQ_{i,t} = \beta_0 + \beta_1 DUAL_{i,t} + \beta_2 TURNTA_{i,t} + \beta_3 DUAL_{i,t} \times TURNTA_{i,t} + \beta_4 Size_{i,t} + \beta_5 AGE_{i,t} + \beta_6 SHRZ_{i,t} + \beta_7 FA_{i,t} + \beta_8 FN_{i,t} + \sum ind + \sum yr + \delta$$

$$\text{Model 3: } TQ_{i,t} = \beta_0 + \beta_1 DUAL_{i,t} + \beta_2 LEV_{i,t} + \beta_3 DUAL_{i,t} \times LEV_{i,t} + \beta_4 Size_{i,t} + \beta_5 AGE_{i,t} + \beta_6 SHRZ_{i,t} + \beta_7 FA_{i,t} + \beta_8 FN_{i,t} + \sum ind + \sum yr + \delta$$

$$\text{Model 4: } TQ_{i,t} = \beta_0 + \beta_1 DUAL_{i,t} + \beta_2 ROA_{i,t} + \beta_3 DUAL_{i,t} \times ROA_{i,t} + \beta_4 Size_{i,t} + \beta_5 AGE_{i,t} + \beta_6 SHRZ_{i,t} + \beta_7 FA_{i,t} + \beta_8 FN_{i,t} + \sum ind + \sum yr + \delta$$

$$\text{Model 5: } TQ_{i,t} = \beta_0 + \beta_1 DUAL_{i,t} + \beta_2 TAGR_{i,t} + \beta_3 DUAL_{i,t} \times TAGR_{i,t} + \beta_4 Size_{i,t} + \beta_5 AGE_{i,t} + \beta_6 SHRZ_{i,t} + \beta_7 FA_{i,t} + \beta_8 FN_{i,t} + \sum ind + \sum yr + \delta$$

Among these models, the “i” in the model represents the enterprise, and “t” represents the year. We use  $\sum$  ind to measure industry fixed effects and  $\sum$ yr to measure time fixed effects. “ $\gamma$ ” and “ $\delta$ ” are random interference terms.

#### 4. Empirical Analyses

##### 4.1. Descriptive Statistics

Table 2 analyzes the research data of this article from five aspects: min, mean, P50, max, and SD. From Table 2, we find that, for the dependent variable (TQ<sup>A</sup>), the average value was 2.34, and the standard deviation was 1.85, indicating that there was not much difference in the firm value between enterprises. For the independent variables, we found that the average value was 0.65, and the standard deviation was 0.48, indicating that more than half of the family businesses in the governance model belonged to the integration of ownership and control group. Among the adjustment variables, the average value of operating capacity (TURNTA) was 0.58, and the maximum value was 2.10. This indicator reflects a stronger operating capacity, which means that there was a certain gap between the firms. The average value of solvency (LEV) was 0.36, and the standard deviation was 0.19. The lower the indicator, the higher the solvency of the company. In general, a company’s asset-liability ratio was about 30–60%, which shows that the firm’s level of debt repayment was acceptable, the minimum value of the profitability (ROA) was −0.33, the maximum value was 0.23, and the average value was 0.05. This indicator reflected the income level of the firm. The data show that some firms had negative net profits, and there was a certain gap between the income levels of the firms. The minimum value of the development capacity (TAGR) was −0.35, the maximum value was 2.55, and the standard deviation was 0.43. This indicator reflects the rate of asset growth of the firm in the current period. It also found gaps among the firms at the development level.

**Table 2.** Descriptive statistics.

	Min	Mean	P50	Max	SD
TQ <sup>A</sup>	0.31	2.34	1.81	11.01	1.85
DUAL	0.00	0.65	1.00	1.00	0.48
TURNTA	0.08	0.58	0.50	2.10	0.36
LEV	0.04	0.36	0.35	0.85	0.19
ROA	−0.33	0.05	0.05	0.23	0.07
TAGR	−0.35	0.24	0.12	2.55	0.43
SHRZ	0.36	2.54	1.51	20.42	3.14
FA	46	51.4	54	74	0.43
FN	4	10.8	14	21	0.30
AGE	2.21	5.31	5.00	20.00	3.96

##### 4.2. Correlation Analysis

To avoid the effect of multicollinearity between independent variables, we used the variance expansion factor test to ensure the accuracy of the conclusions. The results are shown in Table 3.

**Table 3.** Variance inflation factor test.

Variable	VIF	1/VIF
DUAL	1.03	0.93
FA	1.08	0.94
FN	1.03	0.92
SHRZ	1.07	0.96
Size	1.04	0.96
AGE	1.04	0.97
Mean VIF		1.05

Hayes and Matthes (2009) pointed out that if the largest variance expansion factor VIF was  $\leq 10$  in each variable, then the existing multicollinearity problem would not affect the research results. In Table 3, the variance expansion factors in the variables are not more than 10. Meanwhile, as shown in Table 4, the correlation coefficients between the variables were not more than 0.8, so the model did not have obvious multicollinearity.

**Table 4.** Matrix of correlation coefficients between variables.

	TQ	DUAL	TURNTA	LEV	ROA	TAGR	SHRZ	FA	FN	AGE
TQ	1.000									
DUAL	0.265 ***	1.000								
TURNTA	−0.116 ***	−0.027 *	1.000							
LEV	0.025 *	0.008	0.113 ***	1.000						
ROA	0.005	0.001	−0.058 ***	−0.406 ***	1.000					
TAGR	0.024 *	0.016	0.110 ***	0.042 ***	0.079 ***	1.000				
SHRZ	−0.030 **	0.007	0.018	0.039 ***	0.007	−0.012	1.000			
FA	0.044 ***	0.126 ***	−0.076 ***	−0.055 ***	−0.037 ***	0.016	−0.140	1.000		
FN	0.027 *	0.081 *	0.017	0.125 **	−0.033 *	0.203	0.089 *	0.216	1.000	
AGE	−0.003	0.001	−0.001	0.006	−0.005	−0.001	−0.004	−0.001	−0.171	1.000

\*\*\*, \*\*, and \* represent the significance levels of 1%, 5%, and 10%, respectively.

Table 4 lists the correlation coefficients of the variables. The correlation coefficient between the family governance (DUAL) and the enterprise value (TQ<sup>A</sup>) of the family business was 0.265, and it was positively correlated at the level of 1%, which initially verified Hypothesis 1. It shows that in China's family enterprises, the governance model of the integration of ownership and control can promote the promotion of enterprise value.

#### 4.3. Regression Analysis

From Table 5, the adjust-R<sup>2</sup> was 0.136, the P-value was 0.001, the overall model was statistically significant, and Model 1 was constructed reasonably. The coefficient of the governance model (DUAL) and the enterprise value (TQ) of the family business was 0.418, which shows that the governance model of the integration of ownership and control plays a certain role in improving firm value.

#### 4.4. Financial Performance Signal Function Test

From Table 5, the regression of Model 2 shows that the interaction term coefficient of the operational capability (TURNTA) and the integration of ownership and control governance model (DUAL) was 0.469, and it was positively correlated at the level of 1%, indicating that operational capability can regulate the relationship between the governance model of the integration of ownership and control and firm value. In other words, with the improvement of operational capability, the effect of the integration of ownership and control governance model on the improvement of enterprise value is more obvious. Therefore, when an enterprise has high operational capability, this signal can tell investors that the governance model of the enterprise has a higher success probability, and it can be regarded as a credible signal by investors. This conclusion supports Hypothesis 2.

From the analysis of the data regression of Model 3, the coefficient of the interaction term between the solvency (LEV) and the integration of ownership and control governance model (DUAL) was 1.069 and was positively correlated at the level of 1%, indicating that solvency can regulate positively the relationship between the integration of ownership and control governance model and firm value. With the improvement of solvency, the effect of the integration of ownership and control governance model on the improvement of enterprise value is more obvious. In other words, when an enterprise has high solvency, this signal can tell investors that the governance model of the enterprise has potential value, and it can be regarded as a credible signal by investors, which supports Hypothesis 3.

**Table 5.** Regression results of financial performance signals.

	Model 1	Model 2	Model 3	Model 4	Model 5
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
DUAL	0.418 *** (4.04)	0.319 * (1.63)	0.220 * (1.74)	0.181 * (1.83)	0.188 *** (2.16)
TURNNTA		0.469 *** (2.72)			
LEV			0.137 ** (2.41)		
ROA				0.725 * (1.69)	
TAGR					0.145 * (1.68)
DUAL*TURNNTA		0.692 ** (2.16)			
DUAL*LEV			1.069 *** (2.74)		
DUAL*ROA				0.769 *** (3.62)	
DUAL*TAGR					0.089 * (1.74)
SHRZ	0.176 (0.98)	0.008 * (1.78)	0.008 * (1.90)	0.008 * (1.72)	0.011 * (1.74)
FA	0.214 *** (4.36)	0.287 * (1.75)	0.348 ** (2.19)	0.329 * (1.66)	0.310 * (1.65)
FN	0.197 (1.02)	0.236 ** (2.21)	0.096 * (1.90)	0.176 *** (3.09)	0.280 *** (2.77)
AGE	0.002 (0.26)	−0.018 * (−1.89)	−0.003 * (−1.66)	−0.002 (−1.28)	−0.008 * (−1.80)
Size	−0.665 *** (−24.03)	−0.903 *** (−9.45)	−0.929 *** (9.68)	−0.913 *** (−9.85)	−0.964 *** (−9.64)
_cons	15.967 *** (25.18)	21.837 *** (10.26)	22.203 *** (9.78)	21.893 *** (10.57)	23.048 *** (10.34)
YEAR	Control	Control	Control	Control	Control
IND	Control	Control	Control	Control	Control
P	0.001	0.001	0.001	0.002	0.001
R <sup>2</sup>	0.136	0.119	0.131	0.120	0.128
F	134.91	22.67	37.14	27.49	19.81
N	4732	4737	4737	4737	4591

\*\*\*, \*\*, and \* represent the significance levels of 1%, 5%, and 10%, respectively.

The regression results of Model 4 show that the profitability (ROA) and the integration of ownership and control governance model (DUAL) had an interactive term coefficient of 0.769 and were positively correlated at the 1% level, indicating that profitability can positively regulate the relationship between the governance model and firm value. In other words, with the improvement of profitability, the effect of the integration of ownership and control governance model on the improvement of enterprise value is more obvious. Therefore, when an enterprise has high profitability, this signal can tell investors that the governance model of the enterprise has potential value, and it can be regarded as a credible signal by investors, which supports Hypothesis 4.

The data regression results of Model 5 show that the coefficient of the interaction term between the development capability (TAGR) and the integration of ownership and control governance model (DUAL) was positive. With the improvement of development capability, the effect of the integration of ownership and control governance model on the improvement of enterprise value is more obvious. So, when an enterprise has high development capability, this signal can tell investors that the governance model of the enterprise has higher success probability and potential value, and it can be regarded as a credible signal by investors, which supports Hypothesis 5.

#### 4.5. Robustness Test

To improve the reliability of the research conclusions and solve the possible endogenous problems, this paper used the following three methods to test the robustness.

First, considering the influence of the measurement of variables on the reliability of the results, this paper changed the measurement of firm value (TQ) to firm value (TQ<sup>B</sup>).

$$TQ^B = \text{Market Value A} / (\text{Total Assets} - \text{Net Intangible Assets} - \text{Net Goodwill})$$

After re-analysis, according to Table 6, the regression coefficient between DUAL and TQ<sup>B</sup> was 0.601, which was significant at the level of 1%, indicating that the governance model of the integration of ownership and control can promote the improvement of enterprise value, which verifies Hypothesis 1 again. In addition, the coefficient of the interaction term between the TURNTA and DUAL was 0.311 and was positively correlated at the level of 10%, indicating that solvency can positively regulate the relationship between the integration of ownership and control governance model and firm value, which supports Hypothesis 2 again. The data regression results of Model 3 show that the coefficient of the interaction term between LEV and DUAL was positive, which shows that LEV has a regulatory role, which is consistent with the previous test results. The coefficient of the interaction term between the ROA and DUAL was 0.125 and was positively correlated at the level of 5%, indicating that ROA can positively regulate the relationship between the integration of ownership and control governance model and firm value, which supports Hypothesis 4 again. The data regression results of Model 5 show that the coefficient of the interaction term between LEV and DUAL was positive, which shows that LEV has a regulatory role, which supports Hypothesis 5 again.

Second, in the actual situation of Chinese enterprises, the choice governance model of family enterprises is an institutional arrangement. Considering the possible endogenous problem of self-selection error, in order to control the distortion of regression results caused by self-selection error, this paper adopted the Heckman two-stage model to further analyze Hypothesis 1. We adopted a Probit model in the first stage, based on whether the family business chose the integration of ownership and control governance model as the governance mode; if the answer was Yes, it was assigned as 1; otherwise, it was 0. The selection of independent variables in the model included company size (Size), family control age (Age), ownership concentration (SHRZ), family founder age (FA), and number of family managers (FN), so as to calculate the selection correction term, namely the mills inverse ratio (IMR), according to the regression results. In the second stage, IMR was added to Model 1 as a control variable to control the possible sample selection deviation. If the coefficient of IMR is significant, it indicates that there is a selective deviation in the research sample, and this deviation can be effectively corrected by the Heckman two-stage regression, which can effectively correct the self-selection error of family business governance model.

The results of the Heckman two-stage regression are shown in Table 7. The IMR was 0.019 and not significant, indicating that there was no selectivity deviation in the study sample. The regression coefficients of dual and TQ were positively correlated at the level of 1%. Compared with Table 4, the coefficient of DUAL increased slightly (0.445 > 0.418), which shows that the results of the Heckman two-stage regression still support Hypothesis 1.

**Table 6.** Regression results of financial performance signals.

	Model 1	Model 2	Model 3	Model 4	Model 5
DUAL	0.601 *** (2.60)	0.207 *** (3.59)	0.075 * (1.78)	0.149 *** (2.66)	0.011 *** (5.21)
TURNTA		0.229 * (1.73)			
LEV			0.587 *** (4.28)		
ROA				2.761 *** (3.31)	
TAGR					3.181 *** (3.91)
DUAL*TURNTA		0.311 * (1.65)			
DUAL*LEV			0.391 * (1.65)		
DUAL*ROA				0.125 ** (2.27)	
DUAL*TAGR					1.118 ** (2.37)
SHRZ	0.011 *** (5.21)	0.229 (1.33)	0.359 *** (2.88)	0.383 ** (2.07)	0.467 *** (4.65)
FA	−0.587 *** (−11.28)	−0.001 (−0.27)	−0.582 *** (−11.05)	−0.004 (−0.11)	−0.573 *** (−10.78)
FN	−2.761 *** (−11.31)	0.103 *** (3.62)	−2.781 *** (−11.42)	0.099 *** (3.32)	−2.698 *** (−11.19)
AGE	3.181 *** (3.91)	0.205 * (1.78)	3.169 *** (3.93)	0.198 * (1.70)	2.880 *** (3.64)
Size	0.311 * (1.65)	0.349 *** (4.02)	0.308 * (1.66)	0.350 *** (4.03)	0.309 * (1.69)
_cons	16.079 *** (14.52)	0.019 (0.22)	16.045 *** (14.52)	0.018 (0.21)	15.467 *** (13.37)
YEAR	Control	Control	Control	Control	Control
IND	Control	Control	Control	Control	Control
P	0.001	0.001	0.001	0.001	0.001
R <sup>2</sup>	0.319	0.288	0.281	0.314	0.279
F	31.79	32.26	28.94	24.30	22.47
N	4045	4045	4045	4045	4045

\*\*\*, \*\*, and \* represent the significance levels of 1%, 5%, and 10%, respectively.

Third, the independent variable and dependent variables remain unchanged, and the IV-2SLS method was used for empirical regression. The instrumental variable is the lag variable of the explained variable.

After re-analysis, the results are shown in Table 8. The coefficient was positive and significant at the level of 0.05, which is consistent with the above results. The signal test results are consistent with the previous results, indicating that the research conclusion is reliable.

**Table 7.** Results of Heckman two-stage regression.

	<b>Model 1</b>
DUAL	0.445 *** (3.76)
SHRZ	0.103 (1.27)
FA	0.202 ** (2.50)
FN	0.218 (1.03)
AGE	−2.563 ** (−1.97)
Size	−0.202 (−0.98)
_cons	0.331 *** (34.19)
YEAR	Control
IND	Control
P	0.001
R <sup>2</sup>	0.494
IMR	0.019

\*\*\*, \*\* represent the significance levels of 1%, 5%, respectively.

**Table 8.** Results of regression.

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
DUAL	0.474 ** (2.19)	0.145 *** (4.89)	0.251 *** (3.48)	0.084 * (1.71)	0.187 * (1.75)
TURNTA		0.162 *** (4.24)			
LEV			0.260 * (1.88)		
ROA				0.081 *** (3.19)	
TAGR					0.062 ** (2.28)
DUAL*TURNTA		0.881 *** (2.88)			
DUAL*LEV			0.092 ** (2.27)		
DUAL*ROA				0.087 * (1.74)	
DUAL*TAGR					1.485 * (1.90)
SHRZ	0.418 ** (2.14)	0.093 * (1.60)	0.124 *** (3.11)	0.011 (0.32)	0.033 *** (2.70)
FA	−0.150 (−0.79)	0.113 *** (3.53)	0.085 *** (2.96)	−0.168 *** (−3.20)	0.062 (0.69)
FN	−0.098 *** (−3.16)	0.114 (0.48)	0.021 ** (1.92)	−0.030 *** (−5.88)	0.154 ** (2.48)



**Table 8.** *Cont.*

	Model 1	Model 2	Model 3	Model 4	Model 5
AGE	−0.159 *** (−3.26)	0.031 (0.43)	0.171 ** (2.48)	0.161 *** (2.70)	−0.063 (−0.37)
Size	0.321 * (1.65)	0.127 *** (3.13)	−0.081 (1.48)	0.466 (1.39)	0.215 *** (3.58)
_cons	0.027 *** (33.60)	−0.343 *** (26.67)	0.167 *** (30.30)	−0.325 *** (−26.18)	0.234 *** (30.41)
YEAR	Control	Control	Control	Control	Control
IND	Control	Control	Control	Control	Control
P	0.001	0.001	0.001	0.001	0.001
R <sup>2</sup>	0.289	0.194	0.342	0.315	0.236
F	21.55	22.84	28.84	26.17	24.30
N	7791	7791	7791	7791	7791

\*\*\*, \*\*, and \* represent the significance levels of 1%, 5%, and 10%, respectively.

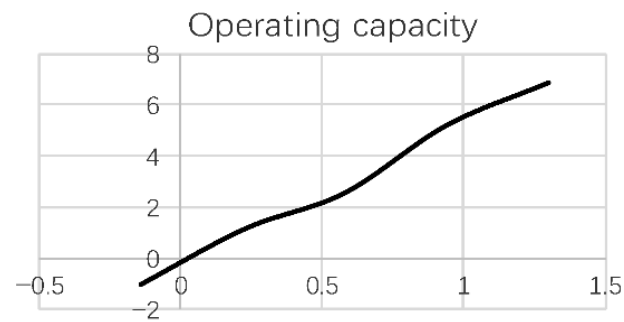
#### 4.6. Further Analysis

To further study the signal moderating effect of operating capacity and solvency, this research analyzed the adjustment effect based on the method of [Hayes and Matthes \(2009\)](#). We divided the operating capacity, solvency, profitability, and development capability into five groups, namely the low-capacity group, the lower-capacity group, the average-capacity group, the higher-capacity group, and the high-capacity group. The calculation method is shown in [Table 9](#). Then, we calculated the relationship between the integration of ownership and control governance model and the enterprise value under each capability group.

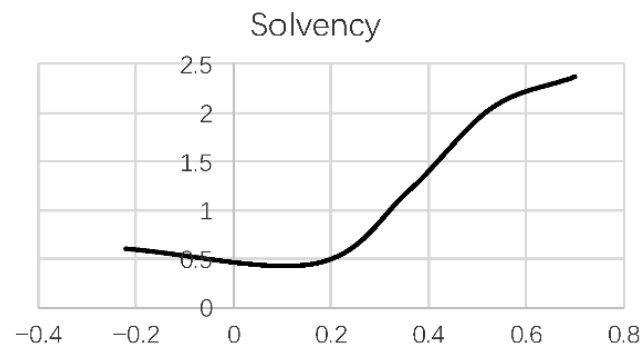
**Table 9.** Group calculation method.

	Calculation
Low-capacity group	Mean − 2SD
Lower-capacity group	Mean − SD
Average-capacity group	Mean
Higher-capacity group	Mean + SD
High-capacity group	Mean + 2SD

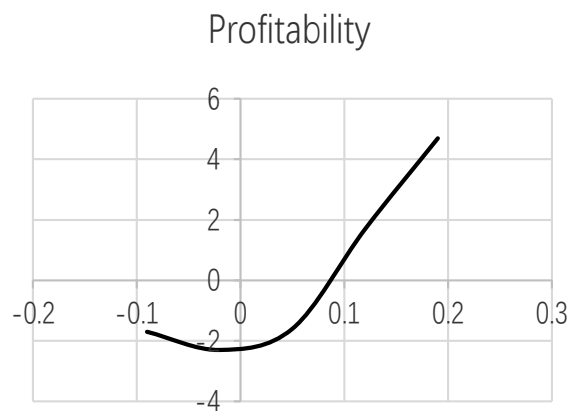
From [Figure 3](#), with the continuous improvement of operating capabilities, the positive impact of the family governance on the firm value also continued to strengthen. In addition, from [Figure 4](#), with the continuous improvement of the solvency, when the solvency is greater than the mean, the positive impact of the family governance on the firm value continues to strengthen, which shows that when the debt capacity is more than or equal to the average value, the signal effect of the solvency is more obvious. From [Figure 5](#), with the continuous improvement of profitability, when that profitability is in the higher-capability group and above, the positive impact of the integration of ownership and control governance model on firm value continues to strengthen. This shows that, when the profitability is greater than the average value, the profitability can send a stronger signal. From [Figure 6](#), with the continuous improvement of development capability, the positive impact of the family governance on the firm value also continued to strengthen.



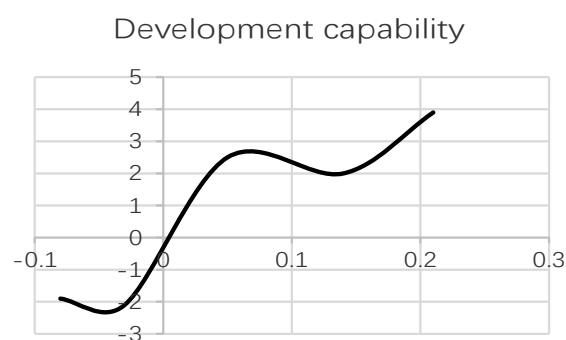
**Figure 3.** Operating capacity moderating effect diagram. The horizontal axis represents operating capacity; the vertical axis represents the effect of DUAL on TQ.



**Figure 4.** Solvency moderating effect diagram. The horizontal axis represents solvency; the vertical axis represents the effect of DUAL on  $TQ^A$ .



**Figure 5.** Profitability moderating effect diagram. The horizontal axis represents profitability; the vertical axis represents the effect of DUAL on  $TQ^A$ .



**Figure 6.** Development capability moderating effect diagram. The horizontal axis represents development capability; the vertical axis represents the effect of DUAL on  $TQ^A$ .

## 5. Discussion and Conclusions

### 5.1. Discussion

This work studied the response of investors to family governance in Chinese family businesses, and the signaling role of corporate and financial performance in this response. This study used the 2011–2020 A-share listed family businesses as a sample, constructed a fixed-effect model, and verified it through the adjustment effect test and other methods. We found that the data analysis results verified Hypotheses 1 to 5. The hypothesis verification results are shown in Table 10.

**Table 10.** Summary of research hypothesis verification.

Research Hypothesis	Results of the Analysis	The Coefficients of Main Results
H1: In family business, the integration of ownership and control governance model promotes the enhancement of the corporate value of a business.	Validated	0.418 *** (4.04)
H2: Operating capacity information can positively regulate investors' response to family governance.	Validated	0.692 ** (2.16)
H3: Debt solvency information can positively regulate investors' response to family governance.	Validated	1.069 *** (2.74)
H4: Profitability information can positively regulate investors' response to family governance.	Validated	0.769 *** (3.62)
H5: Development capacity information can positively regulate investors' response to family governance.	Validated	0.089 * (1.74)

\*\*\*, \*\*, and \* represent the significance levels of 1%, 5%, and 10%, respectively.

According to previous research results, there are two effects of family governance on corporate value. The first conclusion is a positive effect (Gu et al. 2017; He et al. 2011; Miller et al. 2014; Davis and Harveston 2001; Zellweger et al. 2012; Fan et al. 2017); family governance can effectively coordinate the interests of the owners and managers of the enterprises and increase the value of the enterprise (Ni and Wang 2005). The second conclusion is a negative effect; family governance will make it difficult for enterprises to implement management policies, thus hindering the development of enterprises (Yao 2019). The research conclusion of this paper is consistent with the first conclusion—family governance would promote the concentration of the owners and managers at the benefit level and promote the long-term growth and development of the enterprise. In previous findings, it has been found that financial performance can adjust the relationship between the integration of ownership and control governance model and corporate value, which is consistent with the research conclusion of this paper. In addition, this paper first found operating capacity, solvency, profitability, and development capacity can positively regulate Chinese investors' responses to the integration of ownership and control governance model.

This paper enriches the application scope and theoretical value of signal transmission theory and improves the application value of signal transmission theory in the corporate governance of family enterprises. At the same time, the conclusion of this paper provides a reference for family enterprises in China and other countries of the world on how to better strengthen the integrated governance model of ownership and control, and it provides a more credible signal for investors. In Italy, scholars have found that firms with a high percentage of shares owned by family members represent signals of profitability (Leopizzi et al. 2021); the research conclusion of this paper can be extended to the research of this region. For Romanian family businesses, scholars found that the country lacks systematic research on the relationship between corporate governance and financial performance (Hategan et al. 2019). Therefore, this study can provide research ideas for relevant research in this region. For investors, to ensure the credibility of the signal of the integration of ownership

and control governance model, companies with a higher operating capacity, debt-servicing capacity, profitability, and development capability will be selected for investment.

Regarding the operational capability, when the level of the enterprise's operational capability is high, this signal will demonstrate to investors that the family governance of the enterprise will have a better impact on the firm value and improve value. This shows that when an enterprise releases a signal of higher operating capability, investors will judge that the future operating level of the enterprise will be higher, which will promote the enhancement of the firm's value. As a result, this signal increases investors' expectations of the company's future returns and forms a more credible signal of the integration of ownership and control governance model, which strengthens Chinese investors' responses. For investors, to ensure the judgment of the credibility of the signal of the integration of ownership and control governance model, companies with higher operating capabilities can be favorably selected for investment.

As for solvency, when an enterprise's solvency level is high, the enterprise will release a signal to investors that the integration of ownership and control governance model will have a better impact on the company's value. After further analysis of the moderating effect, this paper finds that, with the continuous improvement of its solvency, when the solvency is greater than or equal to the average value, the positive impact of the family governance on firm value is continuously strengthened. Among investors, only when the solvency is not lower than the average level, a stronger positive reaction is formed, which will affect the validity judgments of investors on the signal of the governance model. When a company's solvency level is low, investors should not use this signal to judge the potential value of the governance model. For investors, to ensure the judgment of the credibility of the signal of the integration of ownership and control governance model, companies with higher operating capabilities can be selected as much as possible as an investment.

Regarding profitability, when the level of profitability of a company is high, investors will receive a signal that the integration of ownership and control governance model has a better impact on the value of the company, and the value of the firm remains stable. After further analysis of the moderating effect, this paper finds, that with the continuous improvement of profitability, when the profitability is greater than the average and is at a higher level, the positive impact of the family governance on corporate value is continuously strengthening. For investors, when the profitability is higher than the average level, a stronger positive reaction is formed, which will affect investors' validity judgment on the signal of the governance model. On the contrary, when the profitability level of the enterprise is low, investors should not use this signal to judge the potential value of the governance model.

As for the development capacity, this study found the signaling effect of development capacity. This may be because development capabilities are affected by macroeconomic factors such as the economic environment and market changes. If a company has strong development capabilities, investors can accurately determine whether the future real situation of the company will be equally optimistic. Therefore, development capacity will affect investors' judgment on the credibility of the signal of the integration of ownership and control governance model.

Through analysis, the policy recommendations of this paper are as follows. First, in an asymmetric information trading environment, investors hope to obtain more corporate information to protect their investment income. To ensure the efficiency of investment, investors are supposed to use the financial signals released by the enterprise to judge the credibility of the governance model of the integration of ownership and control of the family business.

Second, family businesses can adopt the governance policy of the integration of ownership and control to manage the enterprise and promote enterprise value. In addition, family businesses can also adopt sound financial policies to stabilize the cash flow of the enterprise and keep the financial performance in good condition. Therefore, Chinese

investors have a stronger positive response, which is conducive to the enhancement of corporate value.

Based on theoretical foundations, such as information asymmetry theory and signal transmission theory, this study found that, in the family business and the governance model, the integration of ownership and control enhances enterprise value. This shows that the effect of family governance of family-owned enterprises and the promotion of corporate value is an obvious positive signal. This kind of signal affects investors' judgment on the future development of enterprises. Subsequently, after analyzing the regulatory effects of financial performance signals, this study found that operating capacity, solvency, profitability, and development capacity positively regulate investors' response to family governance. This shows that, with the continuous improvement of operating capacity, solvency, profitability, and development capacity, the positive impact of family governance on corporate value is continuously strengthened.

The limitation of this paper is that it does not consider whether the institutional environment of the market in which an enterprise is located will affect the signal effect of financial performance. This is because the institutional environments of different regional markets in China are quite different, and the institutional environment of different regions will affect the changes in corporate value.

In the next step of research, the institutional environment can be used as a moderating variable to add to the research process. In addition, the research object can be expanded to non-family listed companies to test whether the signal effect of financial performance is also applicable to non-family companies.

## 5.2. Conclusions

Based on signaling theory, this paper studied the reaction of Chinese investors to the governance model of the integration of ownership and control in Chinese family businesses. Furthermore, this paper studied the signaling role played by corporate financial performance in this response. Through the above research, the conclusions in this paper are as follows.

First, this paper finds that the governance model of the integration of ownership and control promotes the enhancement of firm value in family businesses. For investors, this improvement is a clear positive signal, which affects investors' judgment on the future development of the firm.

Second, on the basis of previous studies, this paper regards the financial performance of enterprises as a signal to investors and finds that operating capacity, solvency, profitability, and development capacity can positively regulate Chinese investors' responses to the integration of ownership and control governance model.

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