



The Impact of Second-Generation Involvement on the Family Firm's Cross-Regional Expansion

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Abstract. The second generation to take over the family business will inevitably be faced with a major strategic decision: to continue with the existing business or to engage in new areas. We explore the impact of second-generation involvement on family firms' cross-regional expansion using Chinese-listed family firms from 2011 to 2022. Our findings indicate that second-generation involvement positively promotes family firms' cross-regional expansion. Further research finds that second-generation involvement facilitates cross-regional expansion through the enhancement of firms' R&D and marketing capabilities. The findings contribute to the understanding of how second-generation involvement gains legitimacy and enrich the literature on intergenerational family transmission in China.

Keywords: Family business; Second-generation involvement; Cross-regional expansion; R&D capability; Marketing capability

1 INTRODUCTION

In recent years, Chinese family businesses are in a critical period of intergenerational inheritance. The second generation carries the mission of family business inheritance and development. Thus, the second generation is destined to face various challenges and difficulties when they get involved^[1]. The second generation may have higher education, broader horizons and be more receptive to new things than their parents. However, the ability of the second generation has not been tested in the field. It is difficult for them to gain legitimacy. This puts the second generation in a situation where employees do not trust them when they get involved^[2]. How can the second generation gain legitimacy in the critical period of intergenerational inheritance? This problem is a must for many scholars who study the intergenerational inheritance of family enterprises. Regarding the path of legitimacy gained by the second generation, academics have given two ways. First, in intergenerational transmission, fathers rely on the prestige they have established in the enterprise. They actively assist the second generation in business strategy change activities. They seek to help the second generation gain legitimacy by getting the approval of internal and external stakeholders after involvement. Second, after the second generation participates in business operations, they are well aware of the urgency and necessity of making superior perfor-

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mance to demonstrate their ability. They tend to favor avenues such as diversification^[3], portfolio entrepreneurship^[4], and increased innovation^[5] to gain legitimacy. It is undeniable that both paths require enterprises to invest a large amount of funds. In China, family-owned enterprises often suffer from financing constraints, which to a certain extent hinders the legitimacy of the second-generation involvement in value creation. In this scenario, will the second generation achieve legitimacy by leading the family business to expand across regions with the help of the parents or their efforts?

Second-generation involvement means that the second generation of the family business is involved in major operational and strategic decisions. In order to gain legitimacy, the second generation and the parents are more cautious in making major strategic choices. This will undoubtedly affect the choice of the family firm's cross-regional expansion strategy. Existing studies related to the economic consequences of second-generation involvement mainly focus on the impact of second-generation involvement on family firms' innovation^{[6][7]}, strategy^[4], and performance^{[8][9]}. Additionally, the existing research literature generally agrees that influences such as government support^{[10][11]}, digitization^[12], and internal and external governance^{[2][13]} impact the cross-regional expansion of firms. There is little literature that explores the relationship between second-generation involvement and firms' cross-regional expansion at the intergenerational inheritance stage of family firms. Therefore, we use empirical data of listed family firms in China from 2011 to 2022. Based on the intergenerational inheritance scenario of family firms, we investigate the impact of second-generation involvement on the cross-regional expansion of family firms through theoretical analysis and empirical tests. We attempted to address three questions. First, can second-generation involvement promote cross-regional expansion of family firms? Second, what is the path of influence of second-generation involvement in promoting cross-regional expansion? Third, are there heterogeneous differences in the impact of second-generation involvement on firms' cross-regional expansion? The answer to the above question not only enriches the academic theory of intergenerational inheritance of family firms in China, but also provides empirical evidence for the high-quality development of the private economy.

Compared with existing studies, the contribution of this article is mainly in two aspects. On the one hand, the research content is innovative. Existing studies mostly focus on the impact of second-generation involvement on family business innovation, strategic change, and firm performance. There is little literature linking second-generation involvement with cross-regional expansion of family firms. Moreover, the relationship between the two is analyzed at the theoretical level and tested in the empirical form. The findings of this research provide empirical evidence that second-generation involvement affects family firms' strategic decisions. On the other hand, Chinese family firms are at the peak of intergenerational inheritance. We explore the influence path of second-generation involvement on firms' cross-regional expansion from the perspective of firm capabilities, enriching the research literature on the influence path of second-generation involvement in intergenerational inheritance.

2 THEORETICAL ANALYSIS AND RESEARCH HYPOTHESIS

The second generation of a family business has a legal right to inherit property. However, it does not mean that they have recognized personal authority and ability. It is very difficult for the second generation to get out of the unconvincing employee dilemma to gain legitimacy in a short period of time^[4]. If the second generation continues to operate the family business without making strategic changes, it will be difficult to distinguish between their parent's work and their contribution. It will be difficult to recognize the second generation's abilities by the rest of the family and the employees. Therefore, the second generation's better option for establishing legitimacy is to prove its ability to operate by breaking away from its old ties and moving into new areas. It should not be overlooked that the second generation needs to invest a large amount of capital to promote the cross-regional expansion of family firms. However, family firms usually encounter serious financing obstacles in the capital market^[14]. This hinders the second generation's ability to build legitimacy through cross-regional expansion. In the context of this reality, can the second generation, with the help of their parents and their own efforts, demonstrate their capabilities and gain legitimacy through cross-regional expansion of their businesses?

From the perspective of paternal help, parents are often heavily influenced by the traditional culture of family inheritance. Parents try to eliminate as much as possible the risks encountered by the second generation in the pre-takeover period after the second generation has taken over in the future. Moreover, parents attempt to highlight the abilities of the second generation to help them gain legitimacy. At the time of the transition of power, the parents will do their best to present a high quality corporate message. This cushions the second generation from the negative effects of market and organizational skepticism when they first take over the corporation. Meanwhile, the parents convey effective information to outside investors about the family business's operation and development capabilities, so that investors still maintain sufficient investment confidence. Continued investor transactions help to alleviate the corporation's financing difficulties and provide financial security for the subsequent support of the second generation to implement cross-regional expansion.

From the perspective of second-generation involvement, Second-generation involvement in the corporation can act as a regulator for the management^[15]. This avoids managers from misusing corporation funds. Furthermore, second-generation involvement can also reduce family business capital appropriation, related transactions, and other hollowing out behaviors^[16], alleviating family business capital problems. The second-generation involvement is conducive to the resolution of the corporation's capital issues, which means that the probability of implementing cross-regional expansion is much higher. The implementation of cross-regional expansion by the second generation highlights their ability to operate and at the same time helps them to gain legitimacy. Therefore, we propose the following hypothesis:

H1: Second-generation involvement is conducive to promoting cross-regional expansion of family firms.

3 RESEARCH DESIGN

3.1 Data Sources

We use Chinese listed family firms from 2011-2022 as the research object. In order to ensure the robustness of the research conclusions, we have done data processing: (1) excluding financial firms, and excluding samples of ST, *ST, PT treatment and terminated listed firms; (2) excluding samples with missing key financial indicators; (3) excluding samples with initial public offerings and unknown ultimate controllers; and (4) excluding firms with transfer of actual control of the family during the sample period. After the above data processing, 17,952 research samples were finally obtained. In addition, in order to reduce the bias and impact of outliers, we Winsorize all continuous variables at the upper and lower 1% quartiles and use robust clustering standard errors. The second generation of data involved is derived from the family firm database in the China Research Data Service Platform (CNRDS). The rest of the data are from the China Stock Market and Accounting Research (CSMAR).

3.2 Variable Definitions

Explained Variable: Firms' Cross-Regional Expansion. We draw on Wang et al. (2021)^[17] and incorporate Thams et al. (2016)^[18] calculations to measure firm expansion across regions (Entropy). The calculation formula is:

$$Entropy = \sum_{i=1}^N p_i \cdot \ln(1/p_i)$$

Where Entropy is the entropy index. $p_i = X_i/X$, which is the ratio of the registered capital of the listed company in city i to the sum of the registered capital of all the listed company's subsidiaries. N is the number of the corporation's cross-regional expansion. The larger the entropy index, the greater the intensity of the corporation's cross-regional expansion.

Explanatory Variables: Second-Generation Involvement. We refer to the measure of Yan Ruosen and Yali Zhao (2022)^[19]. Second-generation involvement (Generation) is denoted as a variable that takes the value of 1 when the second-generation of the de facto controller (including sons, daughters-in-law, daughters and sons-in-law) serves as the chairman of the board of directors, other directors, general manager, or other executives of the corporation, and takes the value of 0 otherwise.

Control Variables. We consider that the cross-regional expansion of family firms is also affected by other factors. We refer to Wang et al. (2021)^[17]. We include relevant control variables in the regression, mainly including: firm size (Size), firm age (Age), equity concentration (Share), gearing ratio (LEV), institutional investor shareholding (Inventor), family chairman (Chairman), and cash holding level (Cash). Additionally, in order to exclude industry-specific and yearly differences, we control for industry

(Industry) and year (Year) fixed effects. The control variables are measured in Table 1.

Table 1. Variable definitions

Variable	Definition
Entropy	We refer to Wang et al. (2021) ^[17] and incorporate Thams et al. (2016) ^[18] calculations to measure the intensity of firms' expansion across regions.
Generation	When the second generation of the actual controller serves as the chairman of the board of directors, other directors, general manager or other executives of the company, it takes the value of 1. Otherwise, it takes the value of 0.
Size	Natural logarithm of the company's total assets at the end of the period
Age	Natural logarithm of the time since the company was founded
Share	We use the Herfindahl index to calculate the concentration of ownership among the top ten shareholders
LEV	Ratio of total liabilities to total assets
Inventor	Sum of institutional investors' shareholdings
Chairman	If the chairman is a member of the family, the value is 1. Otherwise, the value is 0.
Cash	Cash and cash equivalents/total assets
Industry	If the sample is categorized from an industrial dimension, Ind is 1. Otherwise, it is 0.
Year	If the sample is attributed as a time dimension, Year is 1. Otherwise, it is 0.

3.3 Model Design

We construct model (1) to test hypothesis 1:

$$Entropy_{i,t} = \alpha_0 + \alpha_1 Generation_{i,t} + \alpha_2 Controls_{i,t} + \delta_j + \delta_t + \epsilon_{i,t} \tag{1}$$

Where $Entropy_{i,t}$ is the firms' cross-regional expansion. $Generation_{i,t}$ is second-generation involvement. $Control_{i,t}$ is a control variable.

4 EMPIRICAL RESULTS

4.1 Descriptive Statistics

The results of descriptive statistics of the variables are presented in Table 2. The mean and standard deviation of Entropy are 0.129 and 0.140 respectively, indicating that the overall degree of cross-regional expansion of the sample firms is not high, and there are large differences among the firms. The mean and standard deviation of Generation are 0.693 and 0.461 respectively, indicating that the degree of second-generation involvement of the sample enterprises varies greatly.

Table 2. Descriptive statistics

Variable	N	Mean	p50	SD	Min	Max
Entropy	17952	0.129	0.0825	0.140	0.0217	0.871
Generation	17952	0.693	1	0.461	0	1
Size	17952	21.69	21.56	0.977	19.94	24.71
Age	17952	2.800	2.833	0.366	1.609	3.466
Share	17952	0.145	0.121	0.0970	0.0177	0.485
LEV	17952	0.344	0.328	0.180	0.0515	0.799
Inventor	17952	34.45	30.18	25.08	0.282	90.09
Chairman	17952	0.932	1	0.363	0	2
Cash	17952	0.0473	0.0463	0.0662	-0.138	0.230

4.2 Baseline Regression

Table 3 presents the results of the impact of second-generation involvement on firms' expansion across regions, taking into account industry and time fixed effects. The results in column (1) indicate that the regression coefficient of second-generation involvement on cross-regional expansion of family firms is significantly positive at the 1% level ($\beta = 0.006$, $p < 0.01$). Column (2) adds control variables. The results indicate that the regression coefficient of second-generation involvement on firms' cross-regional expansion is significantly positive at the 1% level ($\beta = 0.007$, $p < 0.01$). Both results indicate that second-generation involvement positively affects the cross-regional expansion of family firms. Hypothesis 1 is valid.

Table 3. Regression results

Variable	Entropy	
	(1)	(2)
Generation	0.006*** (2.650)	0.007*** (2.728)
Size		0.004*** (2.905)
Age		-0.017*** (-4.780)
Share		-0.037*** (-3.006)
Lev		0.049*** (6.419)
Inventor		0.002*** (6.362)
Chairman		0.002 (0.804)
Cash		0.045** (2.454)
cons	0.109***	0.039

	(7.521)	(1.112)
<i>Year</i>	Yes	Yes
<i>Industry</i>	Yes	Yes
<i>N</i>	15824	15824
<i>r²_a</i>	0.006	0.018

t statistics in parentheses * p < 0.1, ** p < 0.05, *** p < 0.01

4.3 Endogeneity and Robustness Tests

Lagging Phase I and II. We consider that there may be a lagged effect of second-generation involvement on firms' cross-regional expansion. Therefore, we adopt the method of lagging one period and lagging two periods in the original model. Column (1) and (2) in Table 4 show, the influence coefficients of second-generation involvement (Generation) on firms' cross-regional expansion (Entropy) are 0.0016 and 0.0017, respectively, which are both significantly positive at the 5% level. This indicates that the findings of this article have good robustness.

Table 4. Results of lagged phase I and phase II tests

<i>Variable</i>	(1)	(2)	(3)	(4)
	phase I	phase II	Exclusion of abnormal years	Exclusion of special cities
	<i>Entropy</i>	<i>Entropy</i>	<i>Entropy</i>	<i>Entropy</i>
<i>Generation</i>	0.0016** (2.067)	0.0017** (2.415)	0.0023** (2.231)	0.0030*** (5.057)
<i>Size</i>	0.0000 (0.096)	-0.0001 (-0.335)	-0.0003 (-0.519)	0.0008** (2.762)
<i>FirmAge</i>	-0.0024 (-1.628)	-0.0020 (-1.284)	-0.0019 (-1.277)	-0.0010 (-1.143)
<i>CONTL</i>	0.0073 (1.508)	0.0104* (1.876)	-0.0008 (-0.190)	0.0059 (0.884)
<i>Lev</i>	-0.0006 (-0.302)	-0.0007 (-0.318)	-0.0029 (-1.244)	-0.0024*** (-3.049)
<i>Fchair</i>	0.0013* (1.857)	0.0005 (0.656)	0.0004 (0.444)	0.0012 (1.145)
<i>Cash</i>	0.0072 (0.984)	0.0114 (1.626)	0.0063 (0.587)	0.0014 (0.174)
<i>_cons</i>	0.0942*** (9.399)	0.0973*** (9.485)	0.1003*** (8.129)	0.0742*** (12.495)
<i>Year FE</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>Ind FE</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>N</i>	9054	7244	6244	8100
<i>R²</i>	0.7556	0.7580	0.8267	0.7316
<i>F</i>	2.3192	2.4185	1.5334	7.3924

t statistics in parentheses * p < 0.1, ** p < 0.05, *** p < 0.01

Exclusion of Abnormal Years. Since 2020, the COVID-19 Pandemic has had a significant impact on business development. Therefore, we exclude observations from 2020 to 2022 and use pre-epidemic data for our analysis. Column (3) in Table 4

demonstrates the regression results after excluding the outlier years. The result shows that the coefficient of second-generation involvement is significantly positive at the 5% level ($\beta = 0.0023, p < 0.05$). It indicates that there is still a significant contribution of second-generation involvement to the firms' cross-regional expansion.

Exclusion of Special Cities. China's municipalities and provincial capital cities are usually characterized by greater specificity in terms of capital agglomeration effects and technology agglomeration effects. Therefore, we exclude sample firms from the four largest municipalities and 27 provincial capital cities before conducting the regression analysis. The results in Column (4) of Table 4 show that the regression coefficient of second-generation involvement on firms' cross-regional expansion is significantly positive at the 1% level ($\beta = 0.0030, p < 0.01$), indicating that second-generation involvement significantly promotes firms' cross-regional expansion, even in the areas of non-municipalities and non-provincial capital cities.

4.4 Path Analysis

Baseline regression results have shown that second-generation involvement promotes family firms' cross-regional expansion. However, the path through which second-generation involvement affects the family firm's cross-regional expansion is unclear. We try to give explanations from the two paths of corporate R&D capability and marketing capability. The reasons for our choice are mainly twofold. On the one hand, second-generation involvement and then implementation of cross-regional expansion will find ways to satisfy the product needs of new consumers. Then, the second generation will have sufficient incentives to enhance the firm's R&D capabilities and generate differentiated innovations to satisfy the heterogeneous needs of consumers in different regions. On the other hand, the second generation faces the need to promote the company's products when implementing cross-regional expansion. The company's marketing capability can help the company to quickly develop and implement a marketing plan that meets the actual situation in the region. Targeted marketing plans can increase customer recognition of the company's products and bring positive results for the cross-regional expansion of the family business. Therefore, we test the path of second-generation involvement affecting the family firm's cross-regional expansion in terms of the firm's R&D and marketing capabilities. We construct models (2) and (3) to test the realization path of second-generation involvement affecting firms' cross-regional expansion.

$$\text{MidVar}_{i,t} = \alpha_0 + \alpha_1 \text{Generation}_{i,t} + \alpha_2 \text{Controls}_{i,t} + \delta_j + \delta_t + \varepsilon_{i,t} \quad (2)$$

$$\text{Entropy}_{i,t} = \alpha_0 + \alpha_1 \text{Generation}_{i,t} + \alpha_2 \text{MidVar}_{i,t} + \alpha_3 \text{Controls}_{i,t} + \delta_j + \delta_t + \varepsilon_{i,t} \quad (3)$$

Where, $\text{MidVar}_{i,t}$ is the mediating variable, which is mainly categorized into marketing capability (Sale) and research and development (R&D) capability. The marketing capability (Sale) is measured by marketing expenses as a percentage of gross

revenue. R&D capacity is measured by Intangible assets as a percentage of total assets. $control_{i,t}$ is a control variable.

Columns (1) to (3) of Table 5 present the results of the paths indicating R&D capabilities. In column (1), the regression coefficient of second-generation involvement and firm's cross-regional expansion is 0.0045 and is significant at the 5% level. In column (2), the regression coefficient of second-generation involvement and R&D capability is 0.0045 and is significant at the 1% level. In column (3), the regression coefficient of second-generation involvement and firms' cross-regional expansion after adding firms' R&D capabilities is 0.0041 and is significant at the 5% level. The above results indicate that second-generation involvement can realize the goal of firms' cross-regional expansion through the path of improving firms' R&D capabilities.

Columns (4) through (6) of Table 5 present the results of the paths indicating marketing capabilities. In column (4), the regression coefficient of second-generation involvement and firms' cross-regional expansion is 0.0066 and is significant at the 1% level. In column (5), the regression coefficient of second-generation involvement and R&D capability is 0.0048 and is significant at the 1% level. In column (6), the regression coefficient of second-generation involvement and firms' cross-regional expansion after adding firms' marketing capabilities is 0.0061 and significant at 1% level. The above results indicate that second-generation involvement to achieve the goal of firms' cross-regional expansion can be realized through the path of improving firms' marketing capabilities.

Table 5. Path test results

<i>Variable</i>	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Entropy</i>	<i>RDCap</i>	<i>Entropy</i>	<i>Entropy</i>	<i>MarkCap</i>	<i>Entropy</i>
<i>RDCap</i>			0.0778*** (2.647)			0.1067*** (2.791)
<i>Generation</i>	0.0045** (2.539)	0.0045*** (3.388)	0.0041** (2.405)	0.0066*** (3.216)	0.0048*** (2.608)	0.0061*** (3.162)
<i>Size</i>	-0.0002 (-0.140)	0.0002 (0.202)	-0.0002 (-0.153)	-0.0007 (-0.419)	-0.0060*** (-3.661)	-0.0001 (-0.062)
<i>FirmAge</i>	-0.0026 (-0.241)	-0.0166** (-2.515)	-0.0013 (-0.123)	0.0020 (0.171)	-0.0204** (-1.985)	0.0042 (0.361)
<i>CONTL</i>	0.0070 (0.483)	-0.0028 (-0.266)	0.0072 (0.500)	0.0194 (1.274)	0.0004 (0.024)	0.0194 (1.290)
<i>Lev</i>	0.0040 (0.898)	-0.0150*** (-4.325)	0.0051 (1.167)	0.0146* (1.950)	0.0065 (0.972)	0.0139* (1.885)
<i>Fchair</i>	-0.0008 (-0.670)	-0.0002 (-0.171)	-0.0008 (-0.659)	-0.0003 (-0.192)	-0.0011 (-0.713)	-0.0002 (-0.109)
<i>Cash</i>	0.0099 (1.496)	-0.0293*** (-6.659)	0.0122* (1.779)	0.0032 (0.447)	-0.0316*** (-4.441)	0.0066 (0.874)

_cons	0.1914*** (4.865)	0.0770*** (2.869)	0.1854*** (4.765)	0.0920** (2.006)	0.2363*** (6.116)	0.0668 (1.528)
<i>Year FE</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>Ind FE</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
<i>N</i>	12377	12377	12377	12377	12377	12377
<i>R²</i>	0.2802	0.0771	0.2818	0.0689	0.0591	0.0753

t statistics in parentheses * p < 0.1, ** p < 0.05, *** p < 0.01

5 CONCLUSIONS

China is now at the peak of the intergenerational inheritance of family businesses. The phenomenon of second-generation involvement in business decision-making has begun to occur frequently. Whether to "continue with the current business" or "open up a new field" has become a choice that the second generation must make. Therefore, we adopt Chinese listed family firms from 2011 to 2022 as our research sample based on the family firm perspective. We test the effect of second-generation involvement on firms' cross-regional expansion and its realization path through theoretical analysis and empirical evidence. Our study finds that second-generation involvement facilitates family firms' cross-regional expansion. Our path test finds that second-generation involvement facilitates the realization of cross-regional expansion by enhancing the firm's R&D and marketing capabilities. Our study enriches the body of literature on the intergenerational inheritance of family firms, while providing empirical insights into how the second generation of the family acquires legitimacy.

Reference

1. Ramirez,P.M.,Lundberg,H.,Nordqvist,M. (2021). Next Gene eration External Venturing Practices in Family Owned Businesses[J].Journal of Management Studies,58(1):63- -103.
2. Zhao, Shengmin & Zhang, Bochao. (2021). How Analyst Focus Affects Firms' Investment Behavior - An Analysis Based on Different Investment Types. Journal of Central University of Finance and Economics (05), 51-61.
3. Luo, Jinhui, Chenchen Peng & Yue Liu. (2022). Intergenerational Transmission and Family Firm Diversification. Nankai Management Review (05), 96-108.
4. Li, X.C., Han, J. & Li, W.W.. (2015). Inheritance or Creation of a New Territory? --The Construction of Authority Legitimacy in Second-Generation Succession in Family Firms. Management World (06), 110-124+187-188.
5. Zhao, Y.. (2018). Three Fires for the Young Marshal's Succession? -- Second Generation Succession and R&D Investment in Family Firms. Management Quarterly (04), 99-122+157.
6. Zhao, Y. & Li, X. Chun. (2018). Does Family Firm Succession Period Inhibit R&D Investment? --Moderating Effects Based on Multiple Objectives of Family Firms. Research and Development Management (05), 81-91.
7. Lumpkin, G. T., & Brigham, K. H. (2011). Long - term orientation and intertemporal choice in family firms. Entrepreneurship theory and practice, 35(6), 1149-1169.

8. Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of business venturing*, 22(4), 545-565.
9. Liu, Yanbo & Geng, Xiu Lin. (2021). Second Generation Involvement, Debt Financing Decision and Firm Performance - A Moderated Mediation Effects Model. *Journal of Shanxi University of Finance and Economics* (08), 84-97.
10. Lin, C.W. & Huang, Xia. (2021). Do the new regulations on share reduction affect the investment efficiency of listed companies? --An empirical analysis based on stock liquidity perspective. *Securities Market Herald* (05), 13-25.
11. Liu, Bingkan, Zhang, Weijing & Liu, Yuhai. (2022). Local Economic Policy Uncertainty and Firm Expansion Location Selection - Evidence Based on the Establishment of Subsidiaries by Listed Companies. *Economic Geography* (05), 23-35.
12. Liu, Yi-Wen & Gao, Jing-Lin. (2024). Impact of digital economy development on investment efficiency of manufacturing firms. *Research in Financial Economics* (02), 73-89.
13. Cao, Darren & Kun-Kun Xue. (2023). Director status differences, decision-making process and corporate investment efficiency. *Journal of Capital University of Economics and Business* (06), 78-92.
14. Chan, K.S., Dang, V., Yan, I. (2012). Chinese Firms' Political Connection, Ownership, and Financing Constraints[J]. *Economics Letters*, 115(2):164-167.
15. Huang, H. J., Lv, C. C. & Zhu, X. W.. (2018). Second-generation intervention and corporate innovation - Evidence from Chinese family-listed firms. *Nankai Management Review*. (01), 6-16.
16. Xu, N., Yuan, Q., Jiang, X., et al. (2015). Founder's Political Connections, Second Generation Involvement, and Family Firm Performance: Evidence from China[J]. *Journal of Corporate Finance*, 33(4):243-259.
17. Wang, Bolin, Jia, Zhihan, Peng Yi & He, Xiaogang. (2021). Family control and firms' cross-regional expansion: Empirical evidence from listed firms. *Foreign Economics and Management* (04), 85-110.
18. Thams Y, Alvarado-Vargas M J, Newbury W. Geographical diversification as a predictor of MNC reputations in their home nations[J]. *Journal of Business Research*, 2016, 69(8): 2882-2889.
19. Yan, Ruosen & Wu, Mengxi. (2020). Second Generation Involvement, Institutional Context and Innovation Investment in Chinese Family Firms: A Study Based on Socio-Emotional Wealth Theory. *Economic Management* (03), 23-39.

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