Family Governance Structure: How Does Social Capital Influence the Innovation Strategy Framework?

Min Zhao\textsuperscript{1, 2, a}, Xin Yao\textsuperscript{3, b}

\textsuperscript{1}China National Institute of Standardization, Beijing 100191, China; \textsuperscript{2}Tsinghua University, Beijing 100083, China; \textsuperscript{3}CCPIT Commercial Sub-council, Beijing 100801, China.

\textsuperscript{a}zhaomin@cnis.gov.cn, \textsuperscript{b}yaoxin@ccpit.org

**Keywords:** Family firm, organizational governance, innovation strategy framework, social capital.

**Abstract.** Based on the perspective of organizational governance, this paper analyzes how social capital influences the innovation strategy framework and further studies its impact path and degree of influence. The results show that the influence of family social capital on the innovation strategy framework from the perspective of organizational governance is heterogeneous.

1. **Introduction**

Organizational governance is the organization's system for formulating and implementing decision-making. It is an important guarantee for organizations to achieve long-term, high-efficiency and sustainable development goals. As an important market entity in China, the family firm is also an important area of research on organizational governance in China. At present, family firms are faced with the challenges of governance improvement, intergenerational transmission, market competition and even international competition. How to improve the governance structure and improve the level of innovation has become a key step for the long-term success of family firm.

The innovation strategy framework is based on the dual dimension of family equity involvement and social sentiment wealth. It divides family firms into four categories. Different types of family firms have differences in innovation goals, risk orientation, and knowledge diversification, and in turn create innovations in family firms. The four types of family firms are partly innovator, extended innovator, restricted innovator and active innovator. The innovation strategy framework surpasses the current research on the single-dimensional heterogeneity of family firms. Through multi-dimensional configuration, it analyzes the common influencing mechanisms of family involvement and social sentiment wealth. It is an attempt at family governance and innovation.

Social capital, as an important connecting factor between family firms and the external environment, has a significant role in helping companies obtain environmental support \cite{1}. How does social capital play a role in the innovation strategy framework, and what is the mechanism and the impact path? This is the focus of this paper.

2. **Theoretical Analysis**

The innovation strategy framework is based on the dual dimension of family equity involvement and social sentiment wealth. It divides family firms into four categories. Different types of family firms have differences in innovation goals, risk orientation, and knowledge diversification, and in turn create innovations in family firms. Study shows that family equity involvement level and restricted SEW are negatively related with family firm innovation \cite{2} \cite{3}. Therefore, four types have the following characteristics.
<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partly innovator (Q1)</td>
<td>With a high degree of family equity involvement and restricted SEW, they will take limited innovation strategy, limited innovation investment and tends to short-term incremental innovation project, risk aversion of knowledge innovation and limited diversification.</td>
</tr>
<tr>
<td>Extended innovator (Q2)</td>
<td>With a high level of family equity involvement and family control ability, and holds extended SEW, they tend to long-term return family pursuit of innovation activities, while lack of diversity of knowledge, lack of professional knowledge of non family talent.</td>
</tr>
<tr>
<td>Restricted innovator (Q3)</td>
<td>With a low level of family equity involvement and restricted SEW, they can acquire diversified knowledge resources but lack of knowledge integration ability due to the dislocation.</td>
</tr>
<tr>
<td>Active innovator (Q4)</td>
<td>With a low level of family equity involvement and holds extended SEW, they have long-term risk preference, pursue long-term innovation goals and possess diverse knowledge resources and have strong long-term innovative investment intention.</td>
</tr>
</tbody>
</table>

The innovation strategy framework is a two-dimensional framework of family equity involvement and SEW. Social capital has a regulatory effect on SEW and family equity involvement, and plays a role in family firm innovation through the innovation strategy framework. Social capital intensifies the relationship between two kinds of SEW and innovation, and weakens the relationship between family equity involvement and innovation. Therefore, social capital plays a different role in regulating family firms with different types of innovation strategies. This adjustment is reflected in the innovation strategy framework.

Social capital plays a different role in regulating family firms that hold different types of innovation strategies. Each of the quadrants in Figure 1 is marked with two arrows. From left to right, they indicate the direction in which social capital influences family firm innovation through family equity involvement and types of SEW. Taking the Q1 quadrant as an example, a partly innovator has a higher level of family equity involvement and holds a restrained SEW. Social capital can weaken the hindrance of high family equity involvement in innovation, and indirectly promote the development of innovation. From the positive direction, the arrow on the left side of the Q1 quadrant is upward, indicating that the direction of social capital in regulating family firm innovation is positive. At the same time, social capital reinforces the constraint of restricted SEW on innovation. Because the restrained SEW does not have a significant negative impact on innovation, so the right arrow is the dotted line down. Similarly, the direction of social capital indirect impact on family firm innovation is shown by the quadrant arrows in Figure 1.

From the direction shown by the quadrant arrows in Figure 1, the impact of social capital on family equity involvement and SEW influences innovation strategies of different types in the framework. In the Q1 quadrant, social capital has a positive impact on innovation through the impediment of impeding family equity involvement (upward solid arrow), and has a negative impact on innovation by strengthening the hindrance of restricted SEW (downward dashed arrow), so the overall impact of social capital on innovation of partly innovators is undefined; In Q2 quadrant, social capital has a positive impact on R&D by reducing the impediment of family equity involvement. Social capital also has a positive impact on innovation by enhancing the positive role of the extended SEW intention. Therefore, the overall influence of social capital on innovation of the extended innovator is positive. Similarly in Q3 quadrant, social capital indirectly affects the overall direction of restricted innovator innovation. In Q4 quadrant, the influence of social capital on active innovators is positive.
3. Data Analysis

In order to further verify the foregoing theoretical deduction process, this paper further validates the data. The family firms that hold different innovation strategies are grouped according to the level of social capital, and the average intensity of innovative R&D intensity from each group is compared. The research data mainly comes from the national private enterprises sampling survey database. According to the definition of family firm, this paper screened the family firm data and finally obtained 893 data observations. According to the above theoretical research, this paper calculates the R&D intensity (the ratio of R&D investment and owner's equity).

Based on the grouping of the different types of innovation strategy family firms above, the social capital median (SC=2) is used as the demarcation point to group and calculate the innovation R&D intensity mean value. The results are as follows: Table 2 shows.

<table>
<thead>
<tr>
<th>Group</th>
<th>Partly innovator</th>
<th>Extended innovator</th>
<th>Restricted innovator</th>
<th>Active innovator</th>
</tr>
</thead>
<tbody>
<tr>
<td>High social capital</td>
<td>2.52%</td>
<td>5.27%</td>
<td>2.78%</td>
<td>7.92%</td>
</tr>
<tr>
<td>Low social capital</td>
<td>2.49%</td>
<td>3.11%</td>
<td>2.75%</td>
<td>5.73%</td>
</tr>
<tr>
<td>unclassified</td>
<td>2.54%</td>
<td>4.25%</td>
<td>2.64%</td>
<td>6.83%</td>
</tr>
</tbody>
</table>

The data shows that the average innovation R&D intensity of extended innovators and active innovators in the high social capital group is higher than that of the low social capital group, while the average innovation R&D intensity of partly innovators and restricted innovators is not much different. The data results are consistent with the previous theoretical analysis, and the adjustment effect of social capital on the innovation strategy framework has been verified by data.

4. Conclusion

This article explores how the social capital influences the innovation strategy framework from the perspective of family governance structure, and further studies its impact path and degree of influence. Social capital has a regulating effect on the impact of SEW, family equity involvement, and ultimately has an impact on the innovation of innovation strategy framework. The results show
that the influence of family social capital on the framework is heterogeneous. In the future research, the research scope will be further expanded, and further exploration will be made in the family firm inheritance.

Acknowledgements

This work is supported by Dean Foundation of China National Institute of Standardization (572018Y-5938).

References

