

Research on the Governance Mechanism of Venture Capital Network

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Abstract According to this article, core venture capital enterprise, government, technologist, other related enterprise, agent organization and financing institution etc. compose a venture capital network. The market demand is uncertain; the human resource is proprietary; the task is complicated; the frequent trading the frequency is multifarious in venture capital network. Interactive mechanism, trust mechanism, moderated & integration mechanism, incentive mechanism and maintenance mechanism constitute a governance mechanism of venture capital network. Among them, the trust mechanism is the foundation, interactive mechanism, moderated & integration mechanism are a core, incentive mechanism is the lubricant, maintenance mechanism is the guarantee.

Key words Venture capital network; Governance mechanism; Network structure; Network environment

1 Introduction

Venture capital network means an extensive contactable relation network which is built up by the venture capitalist, technologist and other related business enterprise. Venture capitalists catch the investment opportunity in the newly arisen realm by this relation network. Thus, this relation network evolves into gradually important competitive advantage. In recent years, venture capital invests appear such a trend that the network turns such a united venture capital investment. Venture capital network has become a venture capital realm new research direction.

The domestic and international research concerning venture capital network mainly focuses on the following four aspects. The first is the research of function level. The research of Smith and Lohrke showed that in the developing process of the network, entrepreneur trusts which come from emotions and cognitions are change with the variety of entrepreneur position. The venture capital network provides important social capital source for them and increases the successful possibility.^[1] The second is the research of model. Markus Makela set up a model to study the influence of the variety upon the investor commitment level of venture capital enterprise prospect. The result is that this influence will be enlarged with the keeping off of the investor, and reduce with the increment of the amount of the investor's united investment network and investment scale.^[2] Third, the literature summarization. Wang Xi summarized that venture capital network theoretical research present condition at home and abroad, and pointed out that the study of venture capital network mainly concentrate at the formation of venture capital network, and the influence of the venture capital network upon the enterprise accomplishment etc. But there is little literature analyzing the structure of venture capital network.^[3] The fourth is empirical research studies. Zhu Zhenkun and Jin Zhanmin studied embedded networks of 50 enterprises and 68 venture capital organizations, compared the network characteristic of TMT profession and traditional profession, confirmed the venture capital network have an important function on overcomes a disadvantageous condition to new enterprise, At the same time, analyzed the variety of embedded network under the information technique condition.^[4]

In a word, the research of venture capital network has just started, and a lot of problems need deepen or tried quest, such as the governance mechanism of venture capital network. It is the core problem to promise that network relation healthy development and advance the decision level of venture capital. But this research achievement is quite small. The core problem of the governance mechanism of network is how to design the system.^[5] The governance mechanism of venture capital network means the formal or informal relation arrangement among venture capital investors, and the core is system designing. The governance mechanism of venture capital network is close with the structure of network and the environment of network. Thus, this text will take the governance mechanism of venture capital network as a research object, then study the structure of venture capital network, inquire into the composing foundation of the mechanism, and elaborate the contents of the mechanism at last.

2 The Structure of Venture Capital Network

Like common enterprises, the venture capital enterprise is also an open system which continuously

exchanges resources with the external world. The material or invisible network has formed when the venture capital enterprise continually connects with other organizations or persons. The network influences economic activities and causes relation imbeds and structure imbeds.^[6] The aim of this network is to deal with problems such as indetermination of enterprises' success, the lack of the resources, and the disadvantage of enterprise, to help enterprise strengthen profit ability, carry out the venture investment successful target. At the same time, the network can promote competition ability and anti-risk ability as a whole, finally make all network members benefit together.

Core venture capital enterprise, government, technologist, other related business enterprise, agent organization and financing institution etc. compose the venture capital network. This network is a mixed network (Figure 1). In figure 1, the solid line means the contact among the core venture capital enterprise and other organizations in the network; the dotted line means the contact of other organizations except the core enterprise. Figure 1 includes perpendicular cooperation network and level cooperation network. And we can easily find that the core enterprise has to deal with complex relations among participants. It will be very hard to correspond and communicate in this condition. The venture capital network will come across big or small problems when it is running. Therefore, good network governance seems to be particularly important.

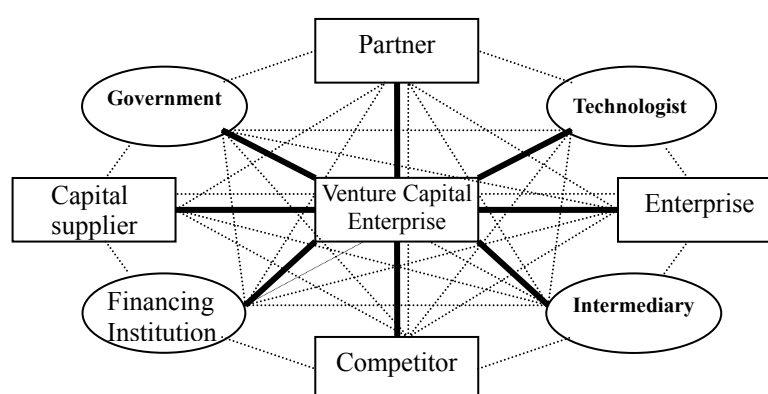


Figure 1 The Structure of Venture Capital Network

3 The Foundation of the Governance Mechanism of Venture Capital Network

3.1 The governance environment of venture capital network

The governance environment is the foundation of the governance mechanism. According to the characteristic of Venture capital network, we choose asset specificity, demand uncertainty, task complexity, and frequency^[7] to analyze the governance environment of venture capital network.

3.1.1 Demand uncertainty

To the venture capital enterprise, market demand is uncertain. Behavior uncertainty and environment uncertainty cause demand uncertainty. Behavior uncertainty appears when consumer's hobby change rapidly and can not be sensed. And environment uncertainty appears when: 1) Knowledge and technology change rapidly. It makes the product life cycle shorten and information standard spread sooner and wider^[8], and strengthen the creative need for the knowledge and technique. 2) There exists the fluctuation trend of "anti-season". Usually, price begins to fluctuate and no regulation can follow this motion, which makes the production of the enterprise inefficient, thus it can not availablely carry on the perpendicular integration of supply, manufacturer and dealer.

3.1.2 Asset specificity

Customizing means enterprise property is appropriation. To venture capital enterprise, this appropriation property is much more than an embodiment on the entity resources of the business enterprise and embodying is more on human resource. The venture capital enterprise isn't likely to have a certain human resource to suit for all work. Therefore, the appropriation human resource constitutes "the appropriation property controls" of venture capital enterprise.

3.1.3 Task complexity

Venture capitals mainly concentrate on the high-tech realm. To the high technique industry gathering cluster, time urgency not only means the urgent customer need, but also means antecedent advantage of creative. Compared with traditional industry, high-tech industry is a more open network

organization. Many innovation enterprises continuously join the network, and some sub networks which mainly are formed by innovation enterprises are changing in order to fit the needs of different innovation task. Therefore what the venture capital enterprise faces is a competition environment of high performance and time limitation.

3.1.4 Frequency

What trading frequency reflects are multifarious degrees of trading among participants. The trading here includes the commutation of actual resources, non- actual resources commutation, such as the information exchange. If one wants to raise the success rate of venture investment, the venture capitalists have to keep higher trading frequency with other participators in the venture capital network. Higher trading frequency can make trust among participators deepen by continual interaction. This can help the enterprise strengthen the stability of the system arrangement, and bring this mutual trust relation into the design of governance structure.

3.2 The foundation of governance mechanism based on the environment

The governance environment is composed by asset specificity, demand uncertainty, task complexity, and frequency. And this environment is the foundation of governance mechanism. Their relation is shown in figure 2.

We can see from the figure, in the environment of the venture capital network, interactive mechanism, trust mechanism, moderated & integration mechanism, incentive mechanism and maintenance mechanism constitute a governance mechanism of venture capital network. Each model of mechanism

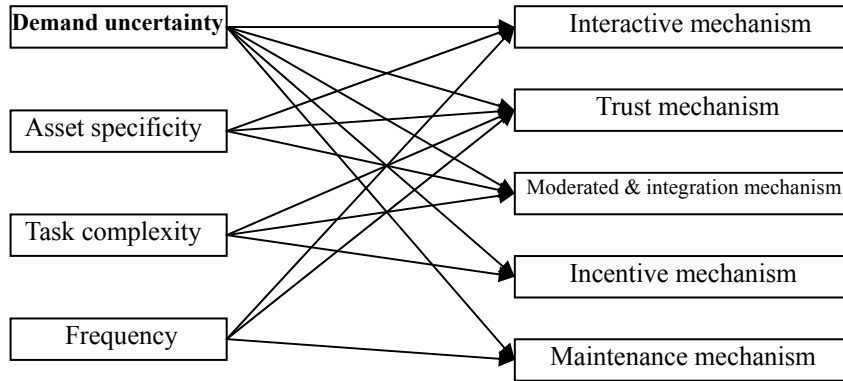


Figure 2 The Relationship Between the Environment and the Mechanism

correlation is shown in Figure 3.

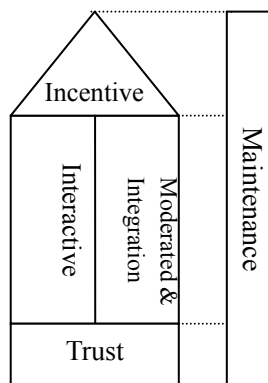


Figure 3 The Venture Capital Network Governance Mechanism Relation Model

Among these mechanisms, the trust mechanism is the foundation. If there is no trust, the venture capital network doesn't exist; interactive mechanism and moderated & integration mechanism is the core, and network governance carries out the target with these two mechanisms; incentive mechanism is the lubricant, and it can make the governance more effective; maintenance mechanism is the guarantee, and

it ensure the network governance running smoothly.

4 The Governance Mechanism of Venture Capital Network

4.1 Trust mechanism

Many researches showed that the trust mechanism plays an important role in the network governance. In the network governance, embed ability is an important characteristic of governance environment; on the other hand, interaction is based on a series formal rule and feelings. So, the trust becomes the necessary premise of network governance. In the environment of network governance, the relation between the organizations is competition and cooperation. The competition is for raising quality and production efficiency of product or service; the purpose of cooperation is to use scarce resources more efficiently, and to raise organization performance. In the interaction of network participants, the dialogue and bargain becomes a necessary path of communication. The premise of cooperates is trust. If you want the network running successfully, you must prevent participants from seeking private interest, and ensure participants cooperate efficiently.

To venture capital enterprise, trust mechanism is built up by informal system arrangement and formal system arrangement. The formal system arrangement in the governance mechanism of venture capital network mainly include formal contract which was signed by venture capital enterprise and other participants and restriction of intermediary organizations (especially guild). The formal system arrangement has compulsive dint in order to ensure cooperate successfully and achieve the goal of network governance.

The informal system arranges realize by cultivating the culture of cooperating and trust. Organization culture is very important for venture capital enterprise and other participants. Organization culture is the root of all organization behaviors. Before changing organization behaviors, organization culture must be changed. We can rebuild enterprise image and behavior pattern by remolding organization culture. Meanwhile, if there is the same organization culture among participants, the organization culture will strengthen the cohesiveness of the network. In order to regulate participants' acts, the venture capital enterprise should promote organization culture building.

4.2 Interactive mechanism

Interactive mechanism is an endogenetic governance mechanism of venture capital network. Complex task requests network participants to complete products or services by interactivity, and strengthen relations among each participant. Because of human resource specificity, the knowledge shares need multifariously interactive. Interactive mechanism indicates that organization's abilities to adapt to and change environment.

For the venture capital enterprise, it is important to interact with other participants. First of all, interacting with other participants is the foundation of venture capital enterprise existence. Secondly, venture capital enterprise is the core of the network; it must adjust itself to fit the need of the network. Thirdly, venture capital enterprise should change the environment instant of adapting to it; changing environment is an important express of interactive.

Venture capital enterprises' interactive mechanism can be expressed and strengthen by competition and cooperation. The cooperation can expand the boundary of enterprise using of resource, promote the formation of common benefits and decrease moderates cost. The competition of reasonableness can increase mutual income and value, reduce latent opportunism.

The interactive mechanism of venture capital enterprises can generalize to three contents: defining network, relationship management and objective management. The venture capital enterprise is the sponsor and core of venture capital network, therefore it owns the power and obligation to define network, and along with environmental variety, the enterprise will also push network variety. The relation is an important characteristic of network; it makes relationship management become very important that the venture capital enterprise must manage internal and external relationships. And objective management is important to clarify the orientation of the activity.

4.3 Moderated & integration mechanism

4.3.1 Moderated mechanism

In terms of the essence, the network doesn't have self-moving relation, and conscious coordination is the foundation of network establishment. Without this, the network will disintegrate. Therefore, the coordination is the basic target of the network governance; at the same time, the coordination is also the important mechanism of the network governance. The venture capital network is no exception. Although each participant' in the network is in the cooperative relation, the conflict of benefits and

expectation will appear inevitably. This often breaks the stability of the whole network. At this time, venture capital enterprise must coordinate this conflict.

Coordinating internal network is mainly embodied in structural adjustment and authorization. By rationalize distribution of internal power and benefits, the venture capital enterprise can decrease organize internal conflict and lower the destructive degree which is brought by conflict. The venture capital enterprise coordinates external network mainly by noise reduction and expelling obstacles. Fake Information and destructive behaviors are full of venture capital networks. Therefore, the venture capital enterprise should deliver true information, deter and punish the behavior that hinders network to operate as usual in good time. If the conflict has already appeared, the venture capital enterprise has responsibility to do a reasonable arrangement about the related square benefits through equal dialogues, thus expels the obstacles of venture capital network movement.

4.3.2 Integration mechanism

Integration mechanism is the key of network governance mechanism. What makes up venture capital enterprise' shortage of resources and ability is the purpose of integration. Integration mechanism includes three contents: resources integration, power integration and organization integration. These three contents are mutual contact. The resources integration needs power integration as premise and assurance, while the power integration also means organization integration.

The venture capital enterprise carries out power integration by dividing power and entrust authorization. Power division can be divided into geography dividing power, market dividing power and administration dividing power. Entrust authorization means organization transfer the power of inner to a certain organization or the organization according to the procedure.

Besides the changing of enterprises' structure, the venture capital enterprise's organization integration includes the changing of the post established and personnel allocation,. Along with continuing of integration, the concept of jurisdiction may change. The integrated information processing not only consumedly accelerates to the fluxion of information and service, but also reduces cost and changes some rules.

4.4 Incentive mechanism

Each system needs incentive mechanism to attain its target. Incentive mechanism not only is an inner need of network, but also reflects the effect of network organization governance. The venture capital network is a system which is built under the win-win idea, which shares risk, profit and achievement. It is hard to build the constrained stipulation mechanism because the network participators are incompact. But the network is built up under the trust, so incentive mechanism will play an important role in the governance.

Incentive method includes economic means and not-economic means. In terms of economic means, Participators' contribution should connect economic income closely. And insist participators' income shouldn't be lower than the income that it is engaged in other works. In terms of not-economic means, venture capital enterprises can use the spirit praises such as fame or reputation to encourage participators.

Reasonable incentive mechanism can meet the realistic demand of network members, prompt participators to change the structure of production or services in order to meet the uncertain demands, encourage actors to find better methods in order to finish complex tasks. In this way, participators' approbation and sense of responsibility will be strengthened, the contrary chooses behavior will reduce, network coagulate dint and the value of the network will rise.

4.5 Maintenance mechanism

As members of venture capital network, in some fields they are copartners, but in other fields they are competitors. These role conflicts will bring tremendous risk to the movement of network. Although incentive mechanism and moderated & integration mechanism can support network running in the certain degree, network governance need maintenance mechanism in the sense of supporting whole function and operation technical ability of network.

For the governance of venture capital network, the mean of maintenance at first is making participators' trading behaviors norm by reaching consensus and permission among them, and by increasing the cost of not appropriate competition behavior. Secondly, maintenance mechanism can guarantee the participants' right of information share by lowering the dissymmetry of information and at the most by quickening the speed of information delivers and by expanding the spread scope of information. Thirdly, maintenance mechanism can reduce the opportunism and morals risk in the bargain by strengthening trust and culture integration. But network governance has no authority structure to protect the rights of governors, thus network governance maintenance effect largely depend

on the social relation imbeds structure.

The venture capital enterprise maintains network by two methods: one is establishment and implementation of the contract, the other is support of network technique. The formal contracts play an important role in maintaining cooperative relation and making participators' behavior norm. This is formal system arrangement in trust mechanism. The venture capital enterprise can attain the purpose of stabilizing cooperative relation by signing formal contracts. Because of the changing of governance environment, the contract should change and perfect along with environment. Secondly, the visible network is the physical carrier of network governance. And it is very important for information delivering. How to keep information from overflowing excessively and how to ensure this carrier be used reasonably and legally becomes the problem that maintenance mechanism must solve. The venture capital enterprise can solve this problem by training or inviting network maintenance experts.

5 Conclusions

The venture capital network transition has already become a trend, but corresponding researches and its governance mechanism are still few. After carrying out a research on the network structure, governance environment and governance mechanism, this text draw the following conclusions:

1) The venture capital enterprise and other organizations or personal cooperative relation have already formed the venture capital gradually.

2) The market demand is uncertain, the human resource is proprietary, the task is complicated, and the trading frequency is multifarious in the venture capital network. In this environment, interactive mechanism, trust mechanism, moderated & integration mechanism, incentive mechanism and maintenance mechanism constitute a governance mechanism of the venture capital network.

3) Among the governance mechanism of venture capital network, the trust mechanism is the foundation, interactive mechanism and moderated & integration mechanism is the core, incentive mechanism is the lubricant, maintenance mechanism is the guarantee.

4) These problems, such as contents and implementation effect of governance mechanism of venture capital network still need further researches from the prospective of quantitative analysis and the empirical analysis.

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