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Designing a Strategic Model for Venture Capitalists in Selecting Startups in Iran with Eemphasis on the Sanctions Period (Case study: Graduate Students of Mazandaran University)

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ABSTRACT

In this article, the authors try to design a strategic decision-making model for venture capitalists in selecting start-up businesses in Iran, with the emphasis on sanctions against Mazandaran University graduate students. The research method is exploratory (qualitative-quantitative). The statistical population in the qualitative section was 30 university professors and executive elites in the fields of management and in the quantitative section was 150 people and investment elites. In the qualitative part, using the snowball method of dreading theoretical saturation with 16 experts, in-depth interviews was conducted and in the quantitative part, to evaluate the model, a researcher-made questionnaire was distributed among 90 samples by relative cluster sampling method. The validity of the questionnaire was confirmed by the face-content method and its reliability by Cronbach's alpha method. Data were analyzed by heuristic and confirmatory factor analysis using SPSS and AMOS software. In Iran, during the Sanctions period, it has 16 dimensions as follows: causal variables (factor of continuous improvement and development of venture capital investment, investment, operation, and support of smart business structure, structure, and accumulation of venture capital companies and operation and support of private centers), variables Background (market and customer analysis, analysis and segmentation of stable dynamic digital market, development, and maintenance of customer relationship, skills and management of the organization), intervention variables (policy setting and maintenance to overcome limitations, forecasting the formation of knowledge-based organization, manpower Efficient and development of production process), strategic variables (optimal analysis and development of products, identification of threats and challenges, innovative strategies, recognition and financing) and outcome (increase of investments, improvement of employment, comprehensive development) innovative paths and the realization of development).

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1. Introduction

Start-up business philosophy seeks to eliminate junk and increase value-added activities during the product or service construction phase; So that startups can be perfect and have a better chance of success without the need for large external investment (Pakroo, 2020). To start a start-up business, the main idea must first be formed. The idea is sometimes created by environmental changes such as the creation of new laws, new government decisions or decisions at the community level that can be best used and then a control group must be formed to follow the process at each stage. Control and then issue permission to enter the next step and if the work was incomplete, stop it and review. In the second stage, the preliminary evaluation of the market is considered. In the third step, conceptualization includes the shape, specifications, features, etc. of the product, and in each of these steps, business risk must be specified. In the fourth step, the financial analysis and the amount of costs required are determined and with the implementation of each step, development takes place. (Carasco and Rothwell, 2020).

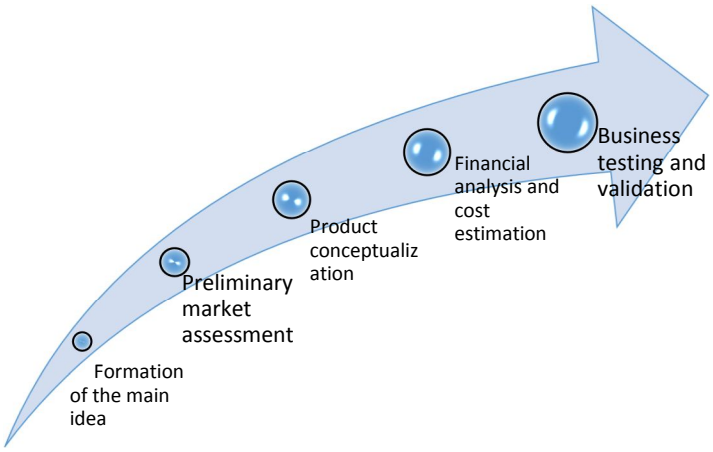

Fig 1. The Five Steps to Starting a Business

Source: Blumberg (2020)

An important point that should not be overlooked is the study of the issue that for the creation, development and prosperity of a new business, the issue of economic viability and, consequently, the risks of the business environment is very important, so the issue Risk management is also very important in creating a new business (Blumberg, 2020). As explained above, having an idea (the first step in starting a new business) is just the beginning. More than 98% of the factors determining the success or failure of a new business or startup depend on how the initial idea is implemented and its rational and scientific risk management (Torchys, 2021). The growing importance of rational and scientific risk management in creating start-ups becomes more tangible when there is a high degree of uncertainty about the factors due to the rapid development of the market of innovative companies as well as the volume of businesses that are considered as innovations. There is an internal evolution of business development and external issues (macroeconomic and market issues) that emphasize the real inherent challenge in the management process. This significant management challenge extends sharply to the external environment, thus increasing the level of uncertainty associated with this market. Also, the time between the emergence of an innovative idea and product launch is another factor that highlights the importance of risk management. The importance of considering the time difference between the concept of an idea and the development of a new product that is marketed is an important and motivating issue for the use of analytical and risk management methods (Navarro, 2021). However, there is a lack of models that cover the level of corporate risk management in innovative and technology companies (Scheuer Man, 2020).

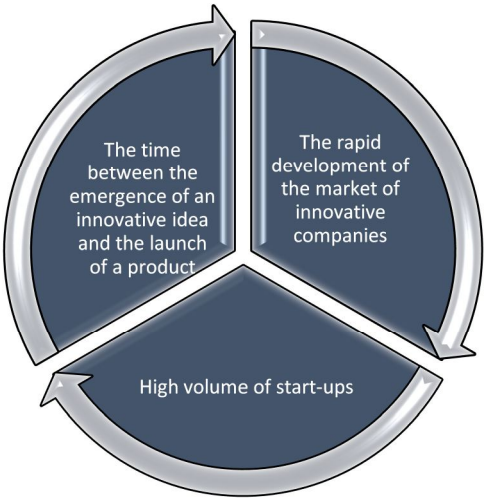

Fig 2. Three reasons for the importance of risk management in start-ups

Source: Blumberg (2020)

This issue is also very tangible in our country, Iran. Given the special political situation in the country, where all kinds of international sanctions against organizations, institutions and individuals against our country have been created in international forums, this issue in its first feedback sometimes challenged the macroeconomic and industrial structures of our country. Has faced (Reshadatjoo and Ebrahimpour, 2020). Sanctions cause "failure to update the banking network and reduce cross-border relations", "failure to improve the flow of risky investment for economic growth", "failure to reduce inflationary expectations" and "failure to return stability to the economy in order to carry out economic reforms". These developments will cause bad production conditions. The embargo has caused a kind of uncertainty in the economy, forcing risky investors to think and be patient before investing. Slowing down of the risk investment process slows down the growth of startups, and as a result, business development is also affected. For this reason, the issue of forming new businesses and continuing risk management in our country is very important. Unfortunately, the reality is that the issue of start-

ups in our country, despite the existence of many elites and educated people, in the difficult conditions of sanctions, has not acted as it should or has not been supported by the authorities (Moradi et al., 2020). But this issue can be examined from another dimension and viewed with the aim of opportunity. In other words, due to the special conditions in the country such as young population, high number of educated people, powerful tool and executive elites, increasing the penetration of digital media, access to and desire for new technologies at the youth level and most of all The problem of employment is one of the reasons that can be used in the fields of creating and developing new business (even in the difficult conditions of international sanctions) (Shirmohammadi et al., 2020). Iran was ranked 139 out of 140 countries in the index of access to risky investment in 2014, and in 2015, it reached the position with an improvement of 4 ranks, which indicates the improvement of access to risky investment in Iran. According to the study, the cooperative investment of the institutions, which shows the main nature of the risky investment, is equal to 122.86 billion Rials from the beginning, which is much less than the facilities provided by the institutions in just one year, which is equal to 447.7 billion Rials. Therefore, institutions spend a small amount on real risky investment (Moradi et al., 2020).

Regarding the importance of the present article, it should be acknowledged that one of the most important factors influencing the growth and economic development of countries is investment and how it is allocated and grown. Investing in risky (start-up) entrepreneurial businesses is one of the areas that requires a lot of attention. Entrepreneurs in this valley have a key role in the process of economic development and with innovation and creative destruction as the main driving force of economic development. Facilitate the achievement of dynamic equilibrium in the economy. In the current economic situation (resistance economy and various economic sanctions) that the country faces important challenges such as declining GDP, devaluation of the national currency, significant decline in economic growth and increase in unemployment and decrease in private sector

investment. And ... has encountered; the importance of entrepreneurs, especially in the decision-making of venture capitalists in choosing risky (start-up) entrepreneurial businesses, is increasing. (Reshadatjoo and Ebrahimpour, 2020).The necessity of doing this article can also be examined from three aspects: First; If venture capitalists can be helped to choose their start-up investment plan, and secondly; Increase the risky investment rate, which is not uncertain with the fuzzy model, and ultimately prevent the waste of liquidity resources, then we can hope for an important part of the country's development. Therefore, it is necessary for its goals in Iran. With these brief introductions, the present article is a quest to provide a reasoned and convincing answer to the question of how to adopt a strategic model in the decision-making of risky investors in the difficult period of international economic sanctions against our country. Were new jobs achieved in Iran?

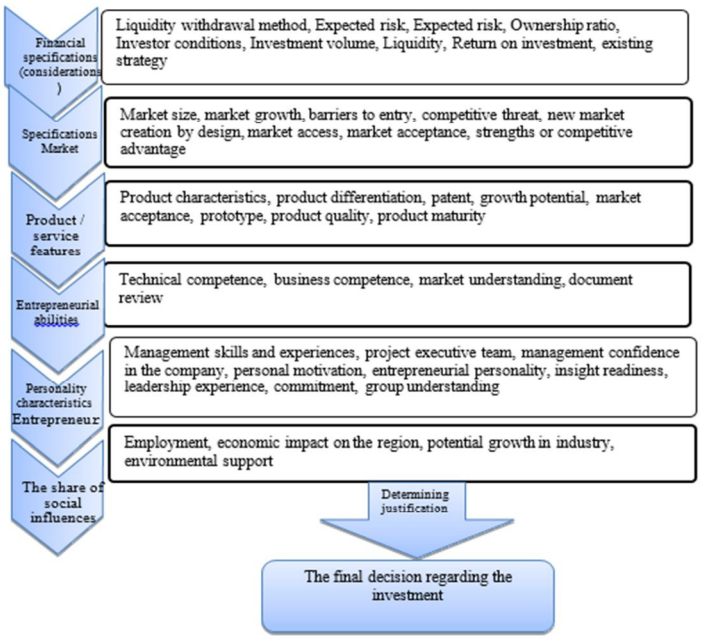

Fig 3. Conceptual model of research

Source: Mirzazadeh et al. (2021)

2. Research Background

Examining the research literature, it was concluded that in recent years, many articles and dissertations on the subject of risk and risk management have considered the decisions of risky investors as important management issues. Research has also provided decision-making models for venture capitalists in selecting start-up businesses or evaluating them in various organizations. However, the relationship between the three pillars of identifying the decision of venture capitalists in the selection of start-up businesses, evaluation and analysis of the decision of venture capitalists in the selection of start-up businesses is an issue that has not been addressed so far. For example, although models for risk management have been presented (Mirzazadeh et al. 2021; Islami Bigdeli 2013; Shirmohammadi et al. 2020; Alipour 1398; Nadafi and Ahmadvand 1396; Salamzadeh and Tajpour 2020; Parsajam et al. 2018; Navarro 2021; Carrasco and Ruthwell 2020), but no model has been considered for startup risk management. However, the success of start-ups has also attracted the attention of other people to the concept of startup, and many articles have been published on how to set up a successful startup (Ziodar and Imanidar 2018; Goodarzi et al. 2018; Bloomberg 2020; Torchiz 2021; Butler 2021) But less risk management in startups. Although researchers such as Pakro (2020) have proposed a model for starting small businesses, there is a lack of risk management models in the field of innovation-based companies. To date, limited research has focused on the transition from a startup to a profitable organization, according to Sherman (2020).The innovation of the present article can be examined from two major dimensions:

-First; past studies have been less likely to develop knowledge barriers regarding venture capitalists 'decision-making choices and have always faced shortcomings. This study explores and identifies the various factors that shape venture capitalists' decision-making choices. Seeks to fill the gap in the literature of this field by comprehensively examining it; Second; This research implements the decision of venture capitalists in choosing start-up

businesses in start-up companies and makes it possible to conduct experimental research in venture capital companies. In fact, this study is a limited part of experimental work to examine the decisions of venture capitalists in the selection of start-up businesses through content analysis method. Relevant literature helps, has designed.

3. Definition of concepts

New Business (Startup): According to the Oxford Dictionary, startup means starting a new business. A startup is an innovative business that is in its infancy or a temporary organization that is looking for a scalable and profitable business model (Felin et al., 2020). The concept of startup sometimes refers to a business in its early stages, sometimes it is considered a method of commercialization, in some cases it is defined as starting a business and sometimes it is considered a company (Butler, 2021). It can be said that startups are defined as companies that are in the early stages of their work and are managed by a core team that has a business idea (Richter et al., 2017). Startups are usually based on innovative and creative ideas. In fact, well-meaning people or individuals with new ideas are looking for ways to monetize that idea and mass-produce products or services based on that idea (Vuong, 2021).

Risk: Risk is the effects of uncertainty in achieving goals and information security (Oana et al., 2021). In fact, they define risk in relation to the consequences (effects, consequences) of the activity and according to what a person values, such as health, environment and property. The consequence is often seen in relation to some reference values (planned values, objectives, etc.) and the focus is often on negative and undesirable consequences. There is always at least one outcome that is considered negative or unfavorable (Schwab, 2017).

Risk management: Risk management is the process through which an organization or investor responds optimally to a variety of risks. In general, a risk management process involves the following steps: risk identification;

Risk Assessment; Decision analysis; possible reduction and planning. In fact, risk management is the process of identifying, evaluating, and controlling potential incidental risks, the obvious consequences of which are damage or failure to change the status quo (Bosch, 2021). Risky investment companies are not the only companies that expose themselves to risks. Today, in the conditions of sanctions, exposure to risks is inherent in every profit-making activity; Because the conditions of activity change every day and tomorrow's situation is always unknown, the only constant is the unknown and change. In this situation, there will inevitably be only companies whose managers are equipped with risk management skills. It seems that risky companies, if not more than normal companies, at least deal with this uncertainty as much as they do. Above this; the income of a risk taker is only from selling risk management skills. The more capable a risk taker is, the more complex the tools are, the better he can control the risk by buying risk from other companies, a higher added value is achieved. On the other hand, companies that don't have enough capacity to control risk, inevitably lose profitable opportunities due to the inability to face the risk along with these opportunities, and inevitably become content with insignificant added value. Risk takers themselves are exposed to all the risks that a normal company faces; although this Risks are more important in some areas due to the nature and field of activity of a risk taker. Therefore, the first duty of a risk taker is to think about his risks. Basically, the function of the venture capital industry in the national innovation system is important because it accepts part of the innovation risk from the entrepreneur and reduces the costs of entrepreneurship in this way (Pakroo, 2020).

Risk management model: Risk management paradigm or model is a set of tasks that are a series of continuous activities throughout the life cycle of a mission and include: risk identification; Analysis; Planning; Follow-up; Control. Understanding all the factors threatening the activity of an organization and how to deal with them in a scientific and homogeneous way is one of the basic principles of designing risk management models.

One of the commonalities of all models is paying attention to risk quantification and two units of frequency and intensity, which are among the basic principles of standards (Nelson, 2019).

Venture capital investment: Venture capital is usually used to come up with a new idea or new product that may have high risk but potential potential for higher-than-average returns. This type of investment is more usable in companies. They have the ability to innovate or special research in superior technologies, and the potential for profit and loss lies in its essence, and for this reason, such funds are often called risky capital (Foster, 2021).

Integrated risk management: According to Kozo, integrated risk management is defined as: "A systematic process in the internal control system that, in order to ensure the implementation of board policies, help achieve the company's goals and protect the assets and wealth of shareholders and the organization. Takes. The purpose of this process is the integrated management and control of the organization's risks. This process considers the interrelationships between the risks and reflects the nature of the risk that does not cross the artificial boundaries of the organization. In addition, this process is constantly reviewed. It is possible to apply the necessary terms in it (McCann & Vroom, 2015). In short, a comprehensive, integrated, and independent risk management framework for the company is designed to maximize shareholder wealth and includes the following objectives:

Prepare proper preparation for future threats and effective use of opportunities ahead; Promoting a reasonable level of confidence in achieving the company's goals; Promoting the stability of decisions and facilitating decision-making and decision-making at different levels of the company; Establishing stability in the growth of the value of equity and other stakeholders of the company; Integrated risk management structure (Hayter, 2019). Based on the integrated risk management document in the form of a three-dimensional or cubic matrix with three levels, it is defined as follows, in which a brief description of each of the dimensions will be provided:

First dimension; Integrated Risk Management Objectives the Integrated Risk Management Framework encompasses four categories of strategic operational, reporting, and compliance objectives. Strategic goals are at a higher level than the other three goals and should be included in the mission and vision of the unit, operational goals, reporting and implementation of the organization. This goal reflects the management's choice of how to create value for stakeholders; Second dimension; Levels of implementation of risk management in the organization, integrated structure of risk management in the organization should be implemented in four macro levels including economic units, departments, business units and affiliated units. These four levels can be implemented in the organizational structure including general levels, regions and departments, branches. And define affiliated units; Third dimension; the components of risk management of an economic unit, risk management has eight interconnected components (including the five components of the internal control system) as follows; (Windsperger et al., 2018).

Fig 4. Integrated risk management in the form of a three-dimensional or cubic matrix with three levels

Source: Research Findings

4. Research Methods

The research method is a kind of mixed exploratory research project (qualitative-quantitative). The statistical population of the research, in the qualitative part, includes university experts and managers, deputies and experts in the field of evaluation of venture capital companies, which have been purposefully selected using the snowball sampling method to achieve theoretical saturation. In this section, 30 people were selected. In this research, Mazandaran University was chosen because 79 knowledge-based companies were registered by students in the growth center of this university, all of which were successful and successful in attracting venture capitalists. Also, the statistical population of the research, in a small part, included the employees of some venture capital companies of 150 people. The characteristics of these venture capitalists are: The priority of investing is with start-up companies with low initial capital. Before making the investment, the exit strategy and the time limit for the withdrawal of the fund from the plan are determined. During the investment period, the fund will fully supervise the executive activities as much as its shares. During the investment period, the fund provides consultations in various fields, such as financial, legal, management, etc., if needed. The sampling method of the research according to the statistical population was sampling of multi-stage relative cluster sampling with Cochran's formula and 90 people, so that each of the four areas of west, east and north and south of the country, the role It played a role, and in the next step, the venture capital firms in each area formed a cluster. The questionnaire was distributed randomly in the cluster and in proportion to the population of the cluster. Due to the fact that the research method in this study was combined, it was done in two stages and as follows:

A- Qualitative part; This part of the research was conducted to identify the strategic components of risky investors' decision-making in selecting start-up businesses in Iran, by conducting in-depth interviews with experts and using grounded theory technique in MaxKDA software version 2018,

which steps Open coding, axial coding and selective coding were performed on in-depth interviews with experts, and by conducting a qualitative analysis in MaxQDA software, the strategic decision-making model of venture capitalists in selecting start-ups in Iran. It was identified with an emphasis on the Sanctions period and presented as a paradigm model.

B- Quantitative part; to test and quantify the strategic decision-making model of venture capitalists in selecting start-ups in Iran with emphasis on the identified sanctions period, it is necessary to test the paradigm model in a statistical population. The required information was collected by surveying the employees of some start-up companies by distributing questionnaires among them. Then, using structural equations (SEM) in AMOS software environment, the data were analyzed to test the dimensions of the strategic decision-making model of venture capitalists in selecting start-up businesses in Iran with emphasis on the identified sanctions period.

5. Findings of the qualitative section

In the qualitative part of the research, the main focus of the research questions is to identify and discover the factors affecting the dimensions, components and indicators related to the strategic decision-making model of venture capitalists in selecting start-ups in Iran with emphasis on sanctions as the main was the main concept. To achieve this, in the first stage, the main categories and sub-components are presented based on open and centralized coding of data from in-depth and exploratory interviews with key experts and the refinement of conceptual codes. Accordingly, in order to perform open and pivotal coding in the first stage, the data at the sentence and phrase level for each of the interviews were examined and conceptual codes were extracted from the transcripts of the interviews. In the next stage, by performing refinement and reduction operation, these components were organized in the form of sub-categories and named by continuous review. In order to ensure the proper organization of each of the concepts and categories, the transcripts of the interviews were re-examined and reviewed

by these categories in order to achieve a logical saturation for the main categories and sub-categories. Open and axial coding stopped when a meaningful classification was obtained after several reviews of interview transcripts. In general, from the analysis of qualitative research data in the coding stage 329, the initial conceptual code was obtained. The findings of the qualitative section are in the form of findings from the coding results with the approach of analysis and concepts of the data. The most basic thing at this stage is open coding. Based on this, common concepts of counting units were counted and common codes were counted. The results of open coding and the code number of the interviewee to each of the factors were examined by experts. Table 1. Shows the dimensions and indicators (open coding).

Table 1. Dimensions and characteristics of the model

Dimensions (open coding)	Index (Axial Coding)
Comprehensive risk analysis	**Managerial**
High predictive power	
Understand the environmental conditions of the organization	
Recognize threats and opportunities	
Knowledge of managers	
Develop and maintain customer relationships	
Financing of institutions	**Economical**
investment	
Formation of private institutions	
Development and prosperity of production	
Development of digital economy	
Market and customer analysis	
Privatization development	
Technology	**Industrial**
Organizational elements for production	
Organized structure	
Development of industrial perspectives	
Increase the quality of manufactured products	

Dimensions (open coding)	Index (Axial Coding)
Government laws and regulations	**Organizational**
Innovative strategies	
Efficient manpower	
Develop a comprehensive program of organizational goals	
Observance of organized organizational rules	
Excellence of social institutions	**Cultural**
Forming and maintaining an entrepreneurship committee	
Organize and maintain the policies and values of the organization	
Creating employment for entrepreneurs	
Supporting the young elite	
Knowledge of entrepreneurs	**Knowledge and research**
Ability to produce knowledge	
Development of knowledge-based companies	
Necessary funds for research	
Ability to access the world's scientific resources	

Source: Research Findings

In the third and final stage, the selected coding stage takes place. Basically, in the third stage or the selected coding stage, the coding process continues until a stage when your information is not added to that main category, then the coding stops. This stage is called saturation. The goal of fundamental theorizing is to produce a theory, not a mere description of a phenomenon. To turn analysis into theory, classes must be related to each other on a regular basis. Selective coding (based on the results of the previous two coding steps) is the main stage of theorizing. In this way, it systematically relates the central class to other classes and presents those relations within the framework of a narrative and modifies the classes that need further improvement and development. At this stage, the researcher, according to her understanding of the text of the phenomenon under study, either presents the framework of the paradigm model as a narrative or breaks down the paradigm model and graphically shows the final theory.

Table 2. Shaping the main classes of theory

Categories	The main classes
Factor of continuous improvement and development of venture capital, investment, operation and support of smart business structure, structure and accumulation of economy of venture capital companies and operation and support of private centers	**Causal variables**
Market and customer analysis, analysis and segmentation of dynamic dynamic digital market, development and maintenance of customer relationship and organizational skills and management	**Background variables**
Formulate and maintain a policy to overcome constraints, anticipate the formation of a knowledge-based organization structure, efficient manpower, and develop and boost production	**Intervention variables**
Optimal product analysis and development, recognizing threats and challenges, innovative strategies, recognizing and financing	**Strategic variables**

Source: Research Findings

The paradigm model of qualitative analysis is shown in Fig. 5:

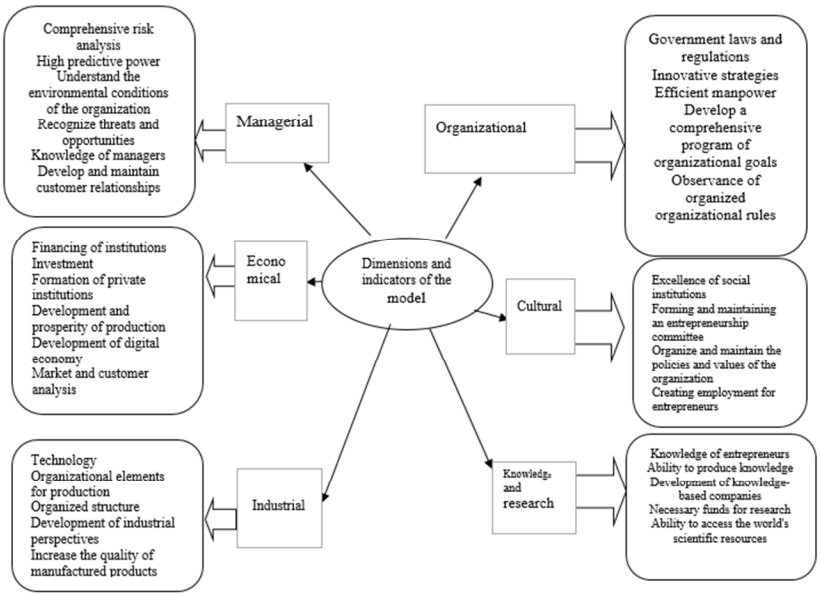

Fig 5. Paradigm model of research in Max Kyoda software environment

Source: Research Findings

a. Quantitative section findings

Descriptive Statistics: In the descriptive study of the subjects, 118 males and 32 females and in the age groups of the subjects, 18 people between 30-35 years old, 44 people between 40-35 years old, 52 people 40-45 years old and 36 people over 50 years old. Have been years. In the study of individuals, 62 people had a bachelor's degree, 50 people had a master's degree and 38 people had a doctorate.

Inferential statistics: At this stage, first the face validity of the questionnaire from the qualitative stage was confirmed during a survey of several experts and their corrections were made. Based on the CVR and CVI calculations for each item, the content validity of the questionnaire was approved by a group of 50 people consisting of Professors and academic elites as well as experts in the field of investment were included, so that the CVR and CVI range for each item was between 0.1- 0.8. To evaluate the model, the questionnaire obtained from the qualitative stage after confirmation of reliability was distributed among 140 samples by relative cluster sampling method and data were analyzed by exploratory and confirmatory factor analysis by SPSS and AMOS software.

Special Question 1: What are the dimensions of the strategic decision-making model of venture capitalists in choosing start-up businesses in Iran with emphasis on the sanctions period?. To determine whether the number of data (sample size and relationship between variables) are suitable for factor analysis, the Kaiser-Meyer fit index and Bartlett test were used. The Kaiser-Meyer fit test is an indicator of sampling adequacy that examines the small partial correlation between variables.

Table 2. Results of KMO index and Bartlett test for research structure

Kaiser Meyer fitness test number and Bartlett test		Structure
0.853	KMO	Causal conditions
1878.272	Barttlett	
120	Df	
0.0009	P-Value	
0.861	KMO	Underlying conditions
2017.364	Barttlett	
120	Df	
0.0009	P-Value	
0.782	KMO	Intervention conditions
1314.198	Barttlett	
55	Df	
0.0009	P-Value	
0.854	KMO	Strategy
3792.804	Barttlett	
496	Df	
0.0009	P-Value	
0.938	KMO	Results (Consequences)
1613.066	Barttlett	
105	Df	
0.0009	P-Value	

Source: Research Findings

Table 2. Shows the value of KMO (sampling adequacy) equal to 0.853, 0.861, 0.782, 0.854 and 0.829 for each of the causal, contextual, intervention, strategy. The outcome and significance level of Bartlett sphericity test is 0.0009. Therefore, in addition to sampling adequacy, the implementation of factor analysis based on the correlation matrix under study will be justified. Table (3) shows the results related to the extracted factors and the percentage of variance explained by the dimensions of causal, contextual, interventional, strategy and outcome conditions.

Table 3. Results related to the extracted factors and the percentage of variance explained by the dimensions of causal, contextual, interventional, strategy and outcome conditions

Total power of factor loads after vari max rotation			**The sum of the quadratic power of the extracted factor loads**			**Initial eigenvalues**			**Dimensions**
Percentage of cumulative variance	Percentage of variance	Total	Percentage of cumulative variance	Percentage of variance	Total	Percentage of cumulative variance	Percentage of variance	Total	
21.15	21.15	3.39	35.27	35.27	5.64	35.27	35.27	5.64	The factor of continuous improvement and development of venture capital
41.00	19.84	3.71	46.17	12.47	1.74	46.17	10.90	4.74	investment
56.35	15.36	2.01	58.09	14.14	1.64	58.09	10.26	3.64	Support the smart structure of business
23.22	23.22	3.66	34.88	32.67	5.39	34.88	33.71	5.39	Economic development of venture capital companies
34.52	23.78	3.19	36.19	35.36	-	36.19	10.23	4.23	Support for private centers
46.23	13.30	3.04	44.17	11.48	-	44.17	16.48	2.16	Market and customer analysis
22.11	19.19	2.89	52.26	12.28	-	52.26	24.66	3.84	Development of digital economy
40.12	29.22	3.33	38.02	31.22	-	38.02	26.19	3.38	Develop and maintain customer relationships

Total power of factor loads after vari max rotation			**The sum of the quadratic power of the extracted factor loads**			**Initial eigenvalues**			**Dimensions**
Percentage of cumulative variance	Percentage of variance	Total	Percentage of cumulative variance	Percentage of variance	Total	Percentage of cumulative variance	Percentage of variance	Total	
39.18	23.99	3.38	31.87	33.35	-	31.87	28.41	3.47	Organization skills and management
24.68	26.03	3.77	49.17	11.05	-	49.17	31.36	2.43	Crossing the limits
34.64	17.31	2.41	51.44	10.89	-	51.44	30.47	3.59	Forming the structure of knowledge-based organization
22.17	22/61	3.70	36.71	30.18	-	36.71	10.88	4.63	Efficient manpower
28.78	20.74	3.85	35.03	34.36	-	35.03	25.34	2.26	Development and prosperity of production
30.36	21/62	3.63	46.74	10.41	-	46.74	20.26	3.87	Innovative strategies
56.52	20/03	2.02	56.55	12.04	-	56.55	10.18	4.93	Recognition and funding

Source: Research Findings

To examine the research model, a second-order confirmatory factor analysis was used, the results of which are shown in Table 4.

Table 4. Second-order factor analysis of the explanatory dimensions of the research paradigm model

Results	P-Value	Amounts t	Standard coefficients	Structural dimensions of the strategic decision-making model of venture capitalists in the selection of start-ups in Iran with emphasis on the sanctions period
It is meaningful	0.0009	6.715	0.59	Continuous improvement and development of venture capital
It is meaningful	0.0009	8.347	0.78	investment
It is meaningful.	0.0009	8.224	0.75	Support the smart structure of business
It is meaningful	0.0009	6.013	0.60	Economic development of venture capital companies
It is meaningful	0.0009	6.715	0.66	Support for private centers
It is meaningful	0.0009	7.347	0.70	Recognition and funding
It is meaningful	0.0009	8.613	0.75	Development of digital economy
It is meaningful	0.0009	7.013	0.62	Develop and maintain customer relationships
It is meaningful	0.0009	7.718	0.56	Organization skills and management
It is meaningful	0.0009	6.420	0.74	Crossing the limits
It is meaningful	0.0009	7.698	0.82	Forming the structure of knowledge-based organization
It is meaningful	0.0009	6.414	0.68	Efficient manpower
It is meaningful	0.0009	6.554	0.70	Development and prosperity of production
It is meaningful	0.0009	7.326	0.81	Innovative strategies
It is meaningful	0.0009	6.001	0.63	Market and customer analysis

Source: Research Findings

Due to the fact that the results (consequences) have two dimensions, so it is not possible to perform a second-order factor analysis for it. From the perspective of the samples, the fifteen dimensions of the exploratory model as model constructs have a significant effect on the decision of venture capitalists in the selection of startup businesses in Iran with emphasis on the Sanctions period. To prioritize the explanatory dimensions of the model, according to the standard coefficients of second-order factor analysis, it is considered that after continuous improvement and development of risky investment in the first priority and then market and customer analysis in the final priority. Special Question 2: What are the relationships between the dimensions of the decision-making model of venture capitalists in choosing start-up businesses in Iran with emphasis on the sanctions period?. To examine the second question of the research, using path analysis in the research model, the relationships between the decision-making dimensions of venture capitalists in the selection of start-up businesses in Iran with emphasis on the Sanctions period were studied. Table 5. Shows the path analysis of the research paradigm model in the case of standard coefficients:

Table 5. Path analysis of the research paradigm model

Results	P-Value	Amounts t	Standard coefficients	routes
It is meaningful	0.0009	2.218	0.59	Causal conditions on the main category
It is meaningful	0.0009	3.018	0.22	The main category on strategies (solutions)
It is meaningful	0.016	3.334	0.57	Background conditions on strategies (solutions)
It is meaningful	0.0009	3.689	0.49	Intervention conditions on strategies (solutions)
It is meaningful	0.0009	4.650	0.70	Strategies (solutions) on the results (consequences)

Source: Research Findings

Special Question 3: What is the priority of each of the dimensions of the decision-making model of venture capitalists in choosing start-up businesses in Iran with emphasis on the sanctions period?. Considering that in the section related to factor analysis, the second-order approval prioritizes each of the dimensions explaining the decision-making model of venture capitalists in the selection of start-up businesses in Iran with emphasis on the sanctions period in this section, examining priorities using tests Friedman was done. The highest priority in terms of performance is related to the result variable with an average rank of 4.65, the second priority is related to the main category with an average rank of 4.37, the third priority is related to intervention conditions with an average rank of 3.68, the fourth priority is related to strategy with an average rank of 3.33, the fifth priority was related to the background conditions with an average rank of 3.18 and the lowest priority in terms of performance was related to the causal category with an average rank of 2.21. In causal terms, the highest priority in terms of performance was related to the dimension of continuous improvement and development of risky investment with an average rating of 2.16 and the lowest priority in terms of performance was related to the dimension of supporting private centers with an average rating of 1.76. In the context, the highest priority in terms of performance was related to the dimension of market and customer analysis with an average rank of 2.28 and the lowest priority in terms of performance was related to the dimension of skills and management of the organization with an average rank of 1.69. In intervention terms, the highest priority in terms of performance was related to setting and maintaining a policy to overcome restrictions with an average rank of 2.24 and the lowest priority in terms of performance was related to the development and prosperity of production with an average rank of 1.62. In strategies, the highest priority in terms of performance was related to the dimension of optimal analysis and development of products with an average rank of 2.99 and the lowest priority in terms of performance was related to the dimension of recognizing threats and challenges with an average rank of

1.94. In the results, ین the highest priority in terms of performance was related to the dimension of increasing investments with a rank of 1.58 and the lowest priority in terms of performance was related to the dimension of development with an average rank of 1.42. Finally, the paradigm model of qualitative analysis is shown as follows:

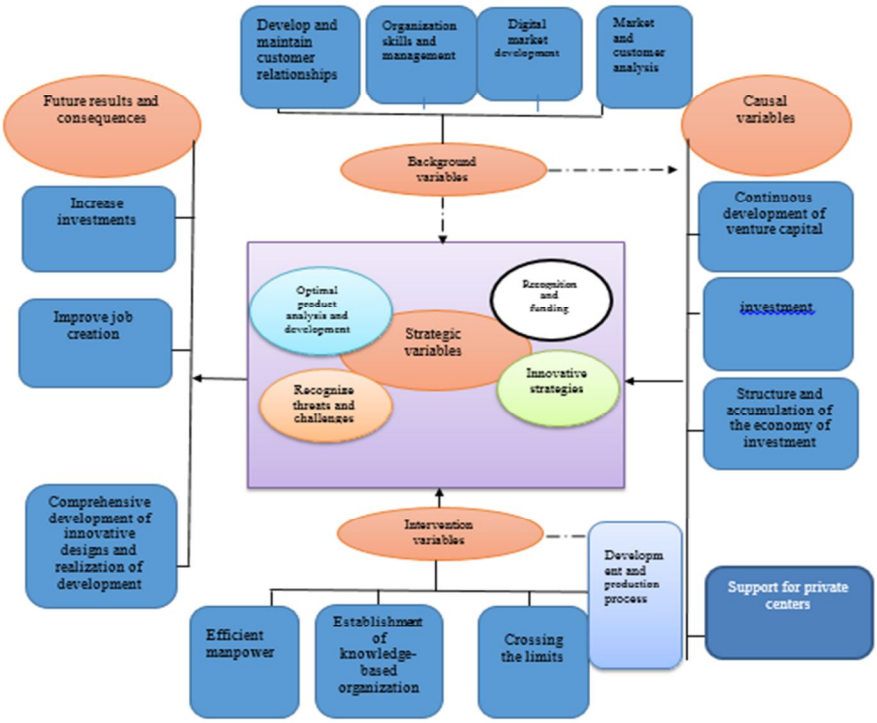

Fig 6. Final research model: Designing a strategic decision-making model for venture capitalists in selecting start-ups in Iran with emphasis on the Sanctions period

6. Conclusion

The engine of technological progress is creative practical ideas that are formed in the minds of entrepreneurs, inventors and innovators, and with their serious pursuit, they will be launched in the form of a new business and

the concept of entrepreneurship will begin. Entrepreneurship is considered as one of the main and most important issues in today's world and the main driver of economic development, and its role in innovation or creating new business spaces is clear to everyone. Paying attention to the fact that entrepreneurship and entrepreneurship are potential elements of development and moving towards progress and development can be very controversial and analyzed. The fact is that many of these efforts to start a new business, due to the lack of three important and effective factors of managerial knowledge and experience, sufficient financial resources and the market and the customer to consume the product of this entrepreneurship, realization and success. Makes new businesses fail. . On the other hand, today the key to problem solving is in the hands of investors who, relying on their high capabilities and accepting calculable or unaccountable risks, are actively associated with entrepreneurs and with the aim of making a profit, their weaknesses (managerial experience, Adequate financial resources and market). These investors are called venture capitalists and have become one of the key links in the national innovation system in developed countries. The important point here is to explain that venture capital as one of the most important sources of financing entrepreneurial and technological businesses plays an important role in the economy. But this debate in our country is in its infancy and has not been considered as it should be. Venture capitalist plays a key role in the entrepreneurial process by providing capital and management support for young companies with high growth rate, high risk and advanced technology and the potential to develop into a global business.

This article is a research in order to formulate a strategic model with emphasis on decision making of venture capitalists in the selection of start-up businesses in Iran. With emphasis on the Sanctions period, it has 16 main and effective dimensions, including: causal dimension (factor of continuous improvement and development of venture capital investment, investment, operation and support of smart business structure, structure and accumulation of economics of venture capital companies and interest Vector

and support of private centers), background dimension (market and customer analysis, analysis and segmentation of sustainable dynamic digital market, development and maintenance of customer relationship and skills and management of the organization), Intervention dimension (setting and maintaining policy to overcome limitations, anticipating the formation of knowledge-based organization structure, efficient manpower and development of production process), strategic dimension (optimal analysis and development of products, recognizing threats and challenges, innovative strategies, Recognition and financing). The consequences of this model will be tangible on four macro levels (increasing investments, improving employment, comprehensive development of innovative projects and achieving development) on the economy and development of the country in the difficult conditions of sanctions.

Based on the purpose of this article is to design a strategic decision-making model for venture capitalists in selecting start-up businesses in Iran with emphasis on the Sanctions period and also based on their indicators and their importance and reproducibility, which results in answering the questionnaire and analysis by scientific elites. And academic and executive has been done that the shape of the designed model presented above. In other words, according to the authors, the design of a strategic model for decision-making by risky investors in the selection of start-ups in Iran with emphasis on the Sanctions period is based on four macro variables. These four macro variables are "causal variables, contextual variables, strategic variables and intervention variables, respectively".

Causal variables: Causal variables are the variables that are the reason for the realization and formation of the strategic decision-making model of venture capitalists in the selection of start-up businesses in Iran with emphasis on the sanctions period. In this regard, the authors emphasize five important factors: "continuous development of venture capital, investment, structure and accumulation of the economy of investment companies, support for private centers, and support of intelligent business structure".

Among these, the first two factors are of particular importance.

Underlying variables: Underlying variables are the components that underlie the realization and formation of the strategic decision-making model of venture capitalists in the selection of start-up businesses in Iran with emphasis on the sanctions period. According to the authors, in this regard, four main and effective variables can be named "digital market development, development and maintenance of customer relations, organizational skills and management, and market and customer analysis."

Intervention variables: Intervention variables mean approaches and policies that facilitate the realization and formation of a strategic decision-making model for venture capitalists in choosing start-up businesses in Iran. In other words, this variable plays the role of catalyst in the realization and formation of risky investors' decisions. In this regard, the authors consider four main types of intervention variables: "efficient manpower, the formation of a knowledge-based organization, overcoming limitations, and development and production process."

Strategic variables: The meaning of strategic variables is the most important strategies and strategies necessary in order to better achieve the formation of a strategic decision-making model for venture capitalists in the selection of start-up businesses in Iran. In this regard, the authors emphasize four important variables: "Optimal analysis and development of products, identification of threats and challenges, recognition and financing and innovative strategies."

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Authors' contributions

All authors had contribution in preparing this paper.

Conflicts of interest

The authors declare no conflict of interest

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