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Presenting a model of investment ethics with financial crises based on grounded theory approach

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ABSTRACT

The formation and emergence of new scientific branches in management shows the complexity of management. The present study aims to provide a model of investment ethics with financial crises based on the grounded theory approach and this research is applied in terms of purpose and has been done with an exploratory approach and quantitative research design. Participants in the interview consisted of 9 experts and experts in the field of finance and the total number of questionnaires distributed was 180. Interviews were analyzed using theme analysis method using MaxQDA software and statistical analysis was performed using SPSS software version 21. The results showed that 5 main categories, 31 sub-categories and 74 open codes were obtained from the interview. According to the confirmation of the fit of the studied model in Smart PLS software and the general fit indices of GOF and Q2 criterion, the optimal model of investment ethics in the financial crisis was presented.

Keywords: Ethics, investment ethics, investment, managers, financial crisis.

1. Introduction

Here are some of the financial scandals that have arisen from investing immorality,1986 Mike Milken and Domestic Business in the 1980s: Dennis Levine, Ivan Bosky, Mike Milken, and Martin Siegel formulate plans to trade information about investment banking. Many of these deals led to the purchase of shares by Mike Milken, "King of Bungalow Bonds" at Drexel Burnham Lambert.

Trader and Nicholson; Bering Bank (1995): Nicholson fraudulently hid over $ 1 billion in trade losses. This severe loss led to the collapse of the Baring Bank.

Enron (2001): Enron executives engage in immoral and deceptive activities to increase corporate profits and stock prices. Jeffrey Skilling, the company's chief executive and short-term CEO, and Andy Fastow, the CFO, used fraudulent accounting techniques to hide debts and increase profits. Timothy Belden, Enron's head of energy services, oversaw commercial abuses in the energy markets. All these activities were supervised by the founder, CEO and chairman of Kent Lai. When the market realized that the company's profits were deceptive, Enron and its stocks fell.

WorldCom (2002): WorldCom CFO Scott Sullivan, with the knowledge of CEO Barry Ebers, was responsible for accounting fraud to increase the company's revenue. Analyst Jack reported good ratings for the Solomon Brothers and then Citigroup in many telecom stocks, including WorldCom, for a profitable investment business. In the face of huge amounts of revenue, WorldCom he went bankrupt.

Bernard Madoff (2008): In the Ponzi scheme, it was revealed that Bernie Madoff had created the $65 billion Ponzi scheme. There are many such scandals that have plagued the history of financial markets. All the people identified in the financial scandals at one point were generously rewarded, well-remembered, or had prestigious job titles. Moral decline turned their success into fines, imprisonment, and humiliation. Madoff received a death threat and a 150-year prison sentence for being credible and respected in the industry (even as chairman of the National Association of Securities Agencies).

Financial Industry professionals, regulators and academics are still struggling to find the cause of the recent crisis. But it is agreed that the housing price bubble burst with low interest rates and large loans, creating overconfidence in markets and underestimating the risk of default. Some investors took out heavy loans and sought higher capital returns on credit-driven investments, which pushed up prices. For example, Beer Stearns advised customers to borrow to invest in mortgage-backed securities. As long as the default rate is negligible, these bonds have the lowest risk. In 2007, as housing prices fell, the risk of default increased and the value of these bonds declined rapidly. The company itself used its budget to engage with a similar strategy to its customers, which resulted in a leverage ratio of 1 to 30.

Financial scandals that emerged in the early 21st century, such as the Enron, MCI, and Global Crossing scandals, damaged the auditor's report and the reputation of the auditing profession, so while the impact of unprofessional behavior and ethical slips may be small, But the collapse of the world's largest companies is leading to the loss of hundreds of billions of dollars' worth of shareholder capital. (Copeland, 2005). In recent years, the issue of ethics in the field of behavioral finance has been considered by financial researchers due to the occurrence of financial and economic scandals. Policymakers and academics have become particularly interested in understanding unethical behavior in the financial services sector, and financial lawmakers have enacted laws to protect investors and creditors in response to these financial irregularities (Kane, 2012). Ethics is a requirement of all professions, which is also defined as a set of principles and values. The scope of ethics is in individual solutions and pressures. But when these behaviors spread to the community level, they become a kind of collective morality that is rooted in the culture of the community with which the community can be identified (David and Resnick, 2015). Therefore, religion and morality are inevitable pillars among the tendencies that lead society towards prosperity. The existence of morality is essential for every group, and if there is no morality in a profession, one must wait for its destruction (Eskandari, 2012). No code of professional conduct (and essentially any legislative process) can address any potential ethical issues that a professional may face. At the same time, the code of professional conduct can serve as a blueprint for establishing the necessary foundations to enhance the competence and usefulness of professions (Cassette, 2016). Even assuming that laws, accepted accounting principles, and practices of comprehensive professional practice preclude and oversee all ethical situations, Pete argues that no matter how many laws and regulations are enacted, there are always those who lie; They deceive or steal. As Plato put it: "Good people do

not need laws to know that they must act responsibly, while bad people are always looking for ways to circumvent the laws" (quoted by Lou et al., 2018).

Lou et al. (2018) also believe that society is a collection of people who know how to circumvent the law; Without breaking the law (Lou et al., 2018). Therefore, adhering to this professional behavior is not all that underlies the ethical decision-making of professionals. "According to Jones, this is a war within each of us." He claims that there is a disconnect between material desires and desires and deep human beliefs about nature and the perfection of creation (Jones, 2018). Because investing is a business-based business order, we have to provide cost-benefit analysis of unethical performance. The benefits of immorality are simple: Immoral behavior can only benefit you if you do not get caught. Greed is one of the reasons why people act immorally. Remember, the investment industry is focused on money, and money is always tempting. The human soul is another reason. Some people act immorally to overcome their poor performance; These people prefer to behave immorally to cover up their failures. It is not enough to rely on laws, professional codes of conduct, or law enforcement officers to ensure that we behave ethically. Laws, professional codes and oversight agents act to prevent the recurrence of past events and punishments. But the financial industry is both innovative and technical. New products and business models create unique opportunities for unethical actions, but they can all be predicted. Accordingly, in order to prevent the occurrence of financial crises caused by immorality, we decided to use the Grand Theory approach to identify the relevant indicators and finally present the optimal model of moral investment in financial crises and To measure.

The difference between this research and other researches presented in this field is more to explain the model and use of Rooker Grand Theory and finally covers the gap in the financial industry in the field of investment ethics to some extent.

2. Methodology

The basis of any science is its method of cognition, and the validity and value of the laws of any science are based on the methodology in which the science is used. Achieving the goals of science or scientific cognition will not be possible unless it is done with the right methodology. In other words, research is valid in terms of method, not the subject of research (Khaki, 2010). The research method can be examined in several ways. In this section, the research methodology is examined in terms of the nature of the data, purpose, data collection method and time period.

2.1. Research method based on the nature of the data

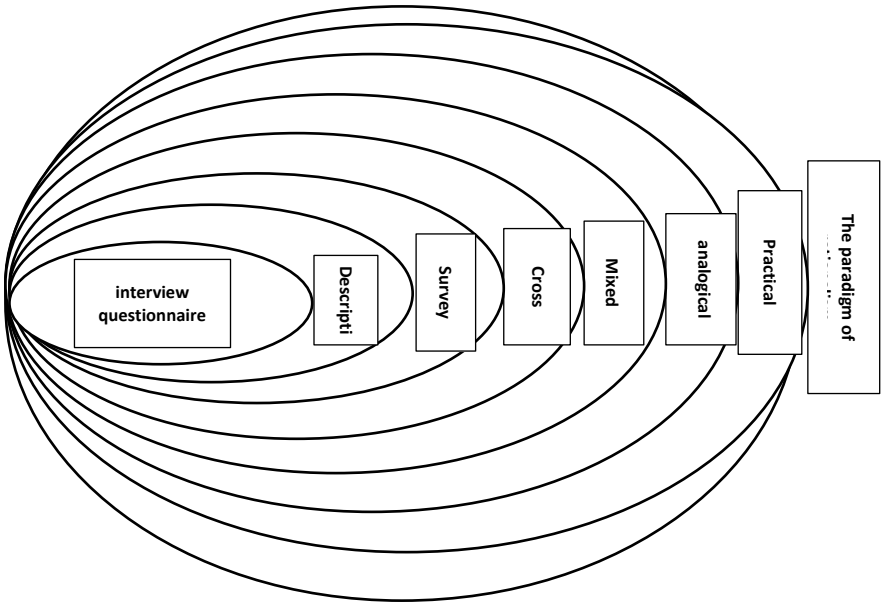
In terms of nature, this research is in the category of mixed (qualitative-quantitative) research. Because first, using the interview method, the pattern of investment ethics is identified from the perspective of experts, and then in a small part, in order to ensure the indicators, research questions are tested in the statistical community.

Research method based on data collection method

Considering that in the present study, the data collection tool is an interview and a questionnaire, and it examines the characteristics and collects information about members of the community, it is descriptive-survey research.

Due to the fact that the present study describes the characteristics, attitudes and beliefs of individuals in a society at a certain point in time, the research is cross-sectional and was conducted in the period of winter 1399 and spring 1400. The research methodology is based on the research onion model. According to this model, research is composed of different layers in which each layer is affected by a higher layer. (Saunders et al., 2009) Researcher based on the onion metaphor of the research process Saunders et al. The layer is drawn as follows:

Research Philosophy: The Rationalism Paradigm
Research Objective: Applied
Research logic: deductive
Research design: mixed
Time horizon: cross-sectional
Nature of research: descriptive
Research Strategy: Survey
Data collection method: interview and questionnaire



Onion research process Shape

In the present study, to assess the reliability of the valid version of the questionnaire, twenty members of the statistical community were given a questionnaire. After a pilot study in a sample of 20 people and the return of the questionnaires, the collected data were entered into Spss 21 software and it was found that the research questionnaires have a very high reliability because after calculating Cronbach's alpha, the numerical value of this the coefficient for the questionnaire in general was 0.815.

Table 1- Cronbach's alpha test results of the questionnaire

Dimensions	Cronbach's alpha value dimensions
Causal factors	0.795
Background factors	0.835
Interfering factors	0.825
Axial category	0.805
Strategies	0.825
Consequences	0.805
Total questionnaire	0.815

To calculate Cronbach's alpha, the following equation can also be used, which can be easily calculated using the relevant software.

$$r_\alpha = \left(\frac{k}{k-1}\right)\left(1-\frac{\sum \sigma_j^2}{\sigma^2}\right)$$

In this regard, r_α is the reliability coefficient of the whole test, K is the number of questions (sections) of the test, σ_j^2 is the variance of the question scores (section) j and σ^2 is the variance of the total scores of the questions (test).

Data analysis is presented in two parts: qualitative findings and quantitative findings. In the qualitative part, the data are analyzed using the foundation data method and MaxQDA software, and in the quantitative part, the findings obtained from the distribution of the questionnaire are tested using the structural equation modeling method. This information was analyzed in SPSS software version 21 and Smart PLS software by applying appropriate statistical tests according to the research hypotheses. Confirmation or rejection of the research hypothesis is presented.

2.2. Findings from coding and classifying interview data

In analyzing the research data, the researcher, according to the opinion of the elite and the majority of researchers performing qualitative analysis, used the systematic school of Strauss and Corbin (1994) and first coded the blocks or the meaningful units in two steps. Creates open and pivoted, and ends with selective encoding. Lincoln and Guba (2010) as well as Kashkari and Tadley (2009) stated that the grounded heuristic approach to theory is an inductive and systematically integrated approach to a whole.

2.3. Open coding

This step is the first step of coding in many qualitative approach strategies (Bieberz, 2018). Strauss and Corbin describe open coding as "a part of analysis that specifically deals with naming and categorizing phenomena through careful examination of data." In other words, in this type of coding, the concepts within the interviews and the documents are classified based on the connection with similar topics. The most important issue is that, according to Saldana (2008), the building blocks of the theory are laid correctly. Therefore, he quotes Kane (2004) believes that we should first study the documents several times and separate the important parts from the unimportant ones in order to focus more on the meaningful units and then extract the original code from these meaningful units. Accordingly, each interview was coded in the same way as the preliminary procedure, and finally 194 initial codes were assigned to the semantic units as meaningful labels. But after applying the opinion of the elites, finally 72 initial codes were selected as the final codes from the meaningful units of the text.

In the second stage of open coding, events are considered as potential signs of the phenomenon (open source), or are analyzed and thus given a conceptual label. In fact, enumerated open codes look different, but with the same meaning, put together to form concepts. The third step is to create categories. Categories are more abstract than concepts and show a higher level (Corbin and Strauss, 1990). At this stage, 72 basic concepts were formed in 31 categories.

3. Results

3.1. Axial coding

The purpose of axial coding is to create a relationship between the generated categories (in the open coding stage). This is usually done on a paradigm basis and helps the theorist to simplify the theorizing process. The basis of communication in axial coding is based on the expansion of one of the categories. The main category (such as the central idea or event) is defined as the phenomenon, and other categories are related to this main category. Causal conditions are cases and events that lead to the creation and development of a phenomenon. Axial coding is in fact the conceptual classification of articles created in a semantic tag that has the highest degree of abstraction, and this semantic tag is no longer able to be placed under another code or category. In fact, Strauss and Corbin (1992) consider axial coding as the stage of formation of independent concepts. Also, Saldana (2010) considers these meaningful units based on research strategies as exploratory independent of the relevant research objectives and calls them available for publication in journals related to any research field (Khaki, 1398).

Axial coding shows the flow of processes and activities that have taken place in the context of this research. Based on the "systematic approach" of Strauss and Corbin (1998), the categories extracted from the raw interview data are collected in the form of a model called the central coding model. This template consists of 6 axes in the following order:

1) Causal conditions: categories related to the conditions that affect the central category;
2) Axis category: The main categories to which other categories can be related and appear repeatedly in the data;
3) Actions: specific actions and interactions that result from the central phenomenon;
4) Background: Specific conditions that affect actions;
5) Interfering Conditions: General contextual conditions that affect leaders;
6) Consequences: Outputs from the application of measures.

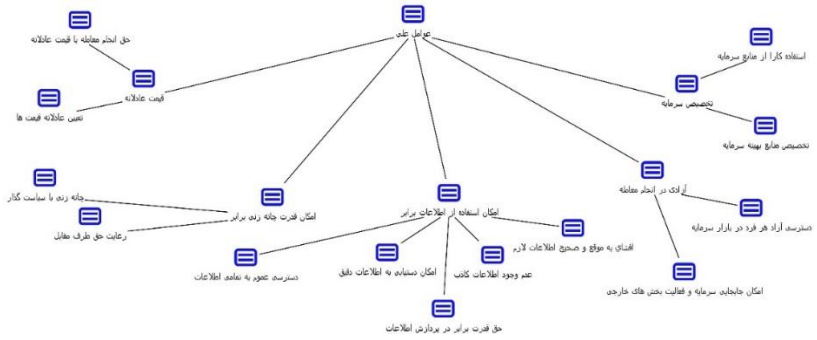
3.2. Causal conditions

The term refers to events or happenings that lead to the occurrence or growth of a phenomenon. Therefore, causal conditions are factors that are directly related to

the subject of research. According to the analysis, the categories of freedom in transaction, the possibility of using equal information, the possibility of equal bargaining power, fair price and capital allocation were determined as causal factors. To better understand the categories of causal conditions as well as their dimensions, as well as the extracted concepts, these extracted categories are shown as a map in Max QDA software.

Table 2- Main and sub-categories of causal conditions

Abundance	Open source	Subcategory	The main category
4	Free access to any person in the capital market	Freedom to trade	**causal conditions**
1	Possibility of capital transfer and activity of foreign sectors		
2	Timely and correct disclosure of necessary information	Ability to use equal information	
5	Lack of false information		
2	The right to equal power in information processing		
1	Ability to access detailed information		
1	Public access to all information		
3	Respect the rights of the other party	Possibility of equal bargaining power	
2	Bargaining with the policymaker		
1	Fair pricing	Fair price	
1	The right to trade at a fair price		
2	Efficient use of capital resources	Capital allocation	
۳	Allocation of optimal capital resources		



3.3. Axial category

One of the characteristics that makes the central category to be determined is that the category should be central and can be related to other categories, and its repetition is also important, i.e., in most cases there are signs that refer to that concept can be He said that the central category is the result of causal conditions, based on this and according to the analysis, the category of moral investment was selected as the central category in this research. According to the analyzes, the categories of honesty, impartiality, rationalism, religious beliefs, trustworthiness, greed, commitment, caution and self-control were identified as the central factors. To better understand the categories of causal conditions as well as their dimensions, as well as the extracted concepts, these extracted categories are shown as a map in Max QDA software.

Table 3 - Main and sub-categories of the central category

Abundance	Open source	Subcategory	The main category
۳	Honesty	Honesty	Axial category
۳	honesty and royalty		
۲	Purity		
٤	equity	Neutrality	
۲	Equality of human beings		
3	Rationalism for the benefit of society as a whole	Logicism	
2	Rationality		
3	Avoiding illegal activities and usury	Religious beliefs	
۳	Considering God		
4	Asset care	Trustworthiness	
1	Confidentiality		
3	Lack of opportunism outside of moral principles	Greed	
۲	Lack of personal interest		
4	Commitment to duty	obligation	
۲	Fulfillment of contracts and full fulfillment of obligations		
1	Be cautious	Caution	
۲	No negligence		
۳	Evaluate your performance results	Monitor yourself	
۲	Ability to control your breath		

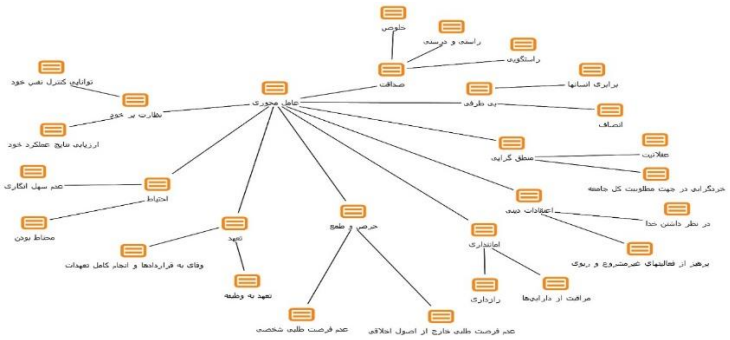


Figure 1 Axial category tree diagram (Max QDA output)

3.4. Background conditions

Background conditions are a specific set of conditions that come together at a specific time and place to create a set of situations or issues and respond to them by their actions. According to the analysis, the categories of full transparency in the capital market, market liquidity, information technology infrastructure, and regulation were identified as underlying factors. To better understand the categories of causal conditions as well as their dimensions, as well as the extracted concepts, these extracted categories are shown as a map in Max QDA software.

Table 4- Main and sub-categories of background conditions

Abundance	Open source	Subcategory	The main category
2	The power of liquidity in the capital market	Liquidity in the market	**Underlying conditions**
1	Increasing the speed of liquidity in the market		
3	Information Transparency Tool	Full transparency in the capital market	
۳	Information circulation		
2	Existence of information transparency		
2	Financial information collection software	IT infrastructure	
3	IT hardware		
10	Shaping rules and regulations	regulation	
5	Existence of complete legal infrastructure in the capital market		
5	Legal systems for capital market supervision		

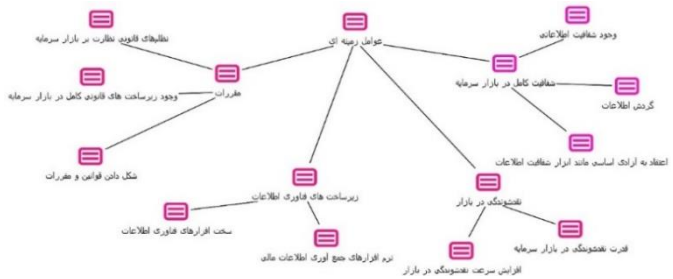


Figure 2- Tree design of the category of background conditions (Max QDA output)

3.5. Interfering conditions

According to the conditions of the situation, the intervening conditions are the general conditions that are determined as the intervening factors based on the analyzes performed on the categories of social norms, acceptable values of society, and moral principles. To understand the categories of causal conditions similarly, as well as decision making, these categories are shown in a map in Max QDA software.

Table 5- Main categories and sub-conditions of the intervener

Abundance	Open source	Subcategory	The main category
8	Norm and public acceptance and obedience	social norms	**Interfering conditions**
2	The identity of human beliefs		
4	Alignment of norms in society	society culture	
٦	Acceptable values of society		
4	Financial ethics norms	ethics fundamental	
2	The moral and indigenous roots of that region		
2	Observance of moral norms and principles		

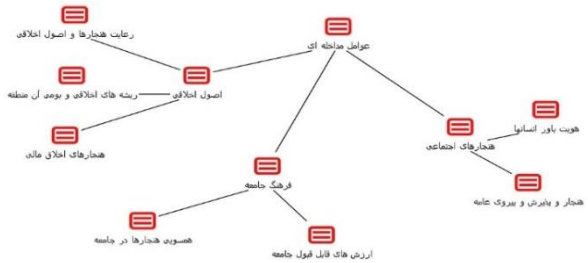


Figure 3- Tree chart of the category of intervening conditions (Max QDA output)

3.6. Strategies

Strategies, actions or interactions are specific that result from the central phenomenon, which according to the analysis of the categories of financial instruments, monitoring and control of financial statements, investment knowledge, foresight, continuous interaction was identified as strategies. To better understand the categories of causal conditions as well as their dimensions, as well as the extracted concepts, these extracted categories are shown as a map in Max QDA software.

Table 6- Main and sub-categories of strategies

Abundance	Open source	Subcategory	The main category
1	Development of financial instruments	Financial instruments	**Strategies**
2	Variety of financial instruments		
2	Supervision and control of financial statements by the supervising authority	Supervision and control of financial statements	
3	Supervision and control of financial statements by the supervising authority in a serious and regular manner		
2	Expert and familiar manpower	Knowledge of investing	
2	Update investment knowledge		
1	Principled futurism	Futurism	
2	Realism towards the future		
2	Foresight and financial planning		
1	Continuous interaction of cultural elites	Continuous interaction	
2	Interact with academic communities		

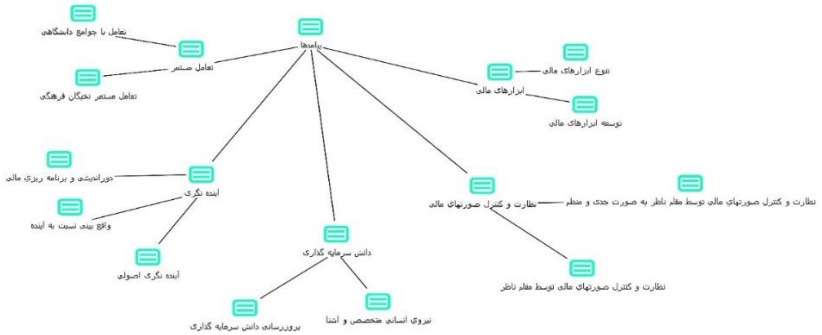


Figure 4- Tree Chart of Strategy Conditions (Max QDA Output)

3.7. consequences

Consequences can be considered as the outputs of strategies that according to the analysis of the categories of respect for the rights of others, social welfare, efficiency of the financial system, prevention of financial crisis, environmental issues, were identified as consequences. To better understand the categories of causal conditions as well as their dimensions, as well as the extracted concepts, these extracted categories are shown as a map in Max QDA software.

Table 7- Main and sub-categories of consequences

Abundance	Open source	Subcategory	The main category
2	Customer rights and citizenship	Respect for the rights of others	consequences
2	The interests of both employers and stakeholders		
5	Poverty Reduction	Social Welfare	
4	Increase purchasing power		
4	Welfare and comfort of people		

Abundance	Open source	Subcategory	The main category
2	Capital market transparency	**Financial system efficiency**	
2	Market development		
2	Financial system cohesion		
9	Control and monitoring of the financial system	**Avoiding the financial crisis**	
1	Market health		
1	Strict regulations governing environmental issues	**Environmental considerations**	
۳	Environmental Protection		

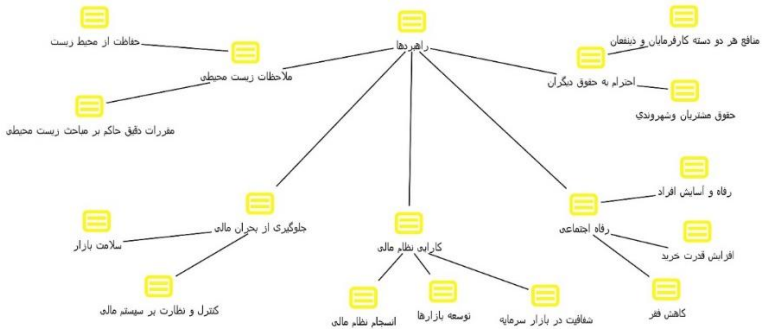


Figure 5- Tree chart of Outcomes category (Max QDA output)

3.8. Selective coding

Selective coding is the process of selecting the main category, systematically linking it to other categories, validating these relationships, and completing categories that need further modification and development. Selective coding based on the results of open coding and axial coding is the main stage of theorizing. In this way, it systematically relates the central category to other categories and presents those relations within the framework of a narrative and corrects the categories that need further improvement and development. Based on the previous steps in the present study, the paradigm model of the research will be as follows.

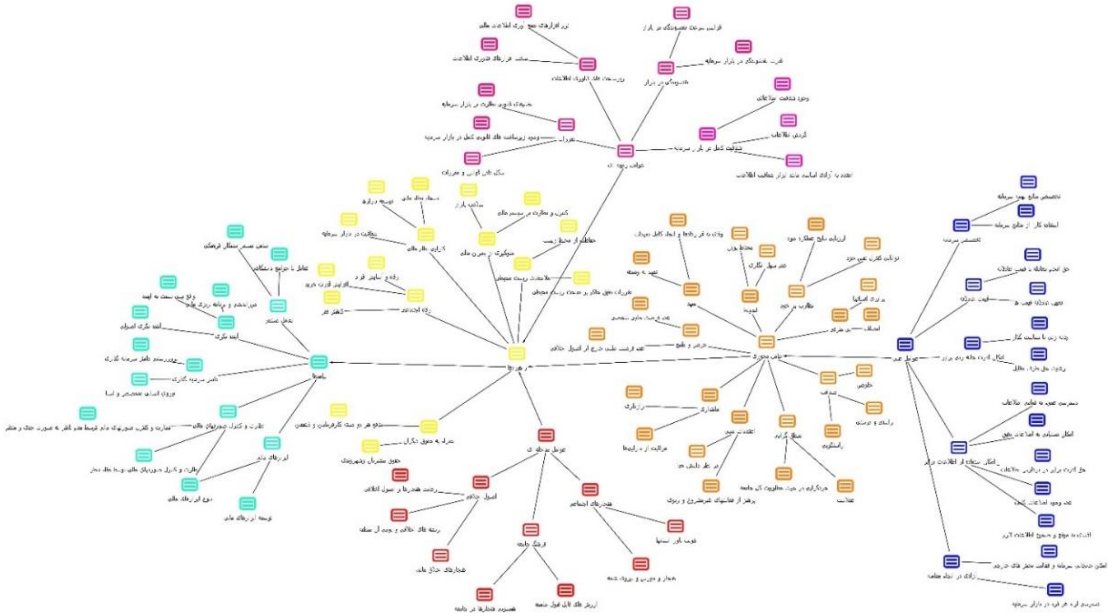


Figure 6- Tree diagram of research paradigm model (Max QDA output)

In order to achieve the factor structure and evaluate the fit of the research model, a quantitative phase is performed. The next section presents some findings.

In the present study, as shown in the table above, all factor loads are above 0.4 and are significant at 95% confidence level.

In this research, in the test phase of the model, it was used to determine the combined reliability (CR):

Table (8) Factors of factor loads

Factor load	Item	Factor load	Item	Factor load	Item	Factor load	Item
۰,۹۱۷	q55	۰,۹۲۲	Q37	۰,۹٤۳	q19	۰,۹۵۱	q1
۰,۸٤۸	q56	۰,۹۰۵	q38	۰,۹۳۷	q20	۰,۹۵۷	q2
۰,۸۹۳	q57	۰,۹۰۰	q39	۰,۹۱۸	q21	۰,۸۱۲	q3
۰,۸٦۵	q58	۰,۸۲۹	q40	۰,۹۱٤	q22	۰,۸۵۷	q4
۰,۸٦۱	q59	۰,۹۰۲	q41	۰,۹۱۵	q23	۰,۸۷۲	q5
۰,۸۸۳	q60	۰,۸۲٤	q42	۰,۹۲٤	q24	۰,۸۵٤	q6
۰,۸۸۳	q61	۰,۹۰۵	q43	۰,۸۷۳	q25	۰,۷۷۳	q7
۰,۸۹۵	q62	۰,۹۰۹	q44	۰,۸۹۰	q26	۰,۹۵٦	q8
۰,۸٤۹	q63	۰,۹٦۷	q45	۰,۹۳۹	q27	۰,۹۵٤	q9
۰,۸۳۰	q64	۰,۹٦۵	q46	۰,۹۳۵	q28	۰,۹۲٤	q10
۰,۸۵۲	q65	۰,۹۱۵	q47	۰,۹۱۷	q29	۰,۹۱٦	q11
۰,۸٤۱	q66	۰,۹٤۸	q48	۰,۹۲۵	q30	۰,۹۱۵	q12
۰,۸۱۲	q67	۰,۹٤۹	q49	۰,۹۲٦	q31	۰,۹۰۱	q13
۰,۸۷۷	q68	۰,۸٦۱	q50	۰,۹۲۵	q32	۰,۸۳۰	q14
۰,۹۲۸	q69	۰,۸۸۳	q51	۰,۸۸۳	q33	۰,۹۲۰	q15
۰,۹۳٦	q70	۰,۹۰۸	q52	۰,۹۰٦	q34	۰,۸٤٤	q16
۰,۸٦۳	q71	۰,۹۲۲	Q53	۰,۸۲٤	q35	۰,۸۷۰	q17
۰,۸۲٦	q72	۰,۹۰۰	Q54	۰,۹۳۲	q36	۰,۸۹۵	q18

Table (9) Combined reliability

Cronbach's alpha	Combined reliability	Variable
0.902	0.953	Freedom to trade
0.838	0.903	Foresight
0.851	0.931	Financial instruments
0.735	0.883	Respect for the rights of others
0.820	0.918	Caution
0.961	0.964	Investment ethics
0.899	0.937	ethics fundamental
0.808	0.912	Religious beliefs
0.790	0.905	Bailment
0.890	0.920	Ability to use equal information
0.903	0.954	Possibility of equal bargaining power
0.718	0.876	Neutrality
0.789	0.904	Capital allocation
0.685	0.864	Continuous interaction
0.860	0.935	obligation
0.849	0.930	Avoiding the financial crisis

Cronbach's alpha	Combined reliability	Variable
0.714	0.875	Greed
0.790	0.905	Knowledge of investing
0.929	0.940	Strategies
0.797	0.881	Social Welfare
0.773	0.898	IT infrastructure
0.927	0.939	Underlying conditions
0.953	0.958	causal conditions
0.933	0.946	Interfering conditions
0.841	0.905	Full transparency in the capital market
0.832	0.900	Honesty
0.928	0.965	society culture
0.819	0.917	Fair price
0.811	0.888	regulation
0.600	0.833	Environmental considerations
0.868	0.938	Logicism
0.833	0.923	Monitor yourself
0.805	0.911	Supervision and control of financial statements
0.836	0.924	Liquidity in the market
0.784	0.903	social norms
0.940	0.949	consequences
0.798	0.881	Financial system work

In the table above, the combined reliability coefficients of all variables in this study are greater than the minimum value of 0.7.

In addition to the content validity of the questionnaire is examined using the PLS structural equation model, convergent and divergent validity is also examined. The AVE index is used to measure the validity of a structure and is also referred to as convergent validity (Fornell and Larker, 1981).

As can be seen, the model is at a very good level in terms of all three of the above criteria.

Table (10) Convergent validity

AVE	Variable	AVE	Variable
0.712	Social Welfare	0.911	Freedom to trade
0.815	IT infrastructure	0.755	Foresight
0.606	Underlying conditions	0.870	Financial instruments
0.640	causal conditions	0.790	Respect for the rights of others
0.715	Interfering conditions	0.848	Caution
0.760	Full transparency in the capital market	0.586	Investment ethics
0.749	Honesty	0.832	ethics fundamental
0.932	society culture	0.839	Religious beliefs
0.847	Fair price	0.826	Bailment
0.727	regulation	0.696	Ability to use equal information
0.714	Environmental considerations	0.912	Possibility of equal bargaining power

AVE	Variable	AVE	Variable
0.883	Logicism	0.780	Neutrality
0.857	Monitor yourself	0.825	Capital allocation
0.836	Supervision and control of financial statements	0.760	Continuous interaction
0.859	Liquidity in the market	0.877	obligation
0.823	social norms	0.869	Avoiding the financial crisis
0.649	consequences	0.777	Greed
0.712	Financial system work	0.826	Knowledge of investing
-	=	0.587	Strategies

Conclusion

Question 1: What are the components of the ethical investment model in the financial crisis?

In order to answer this question, semi-structured interviews were conducted with experts and based on the qualitative analysis, the main and sub-categories including 6 main categories and 37 sub-categories were obtained.

Based on the above results, since the T-statistic related to the main categories is in the range between 114.623 to 27.759 and is greater than 1.96, all of the above categories are confirmed in predicting the ethical investment model in the financial crisis at the 95% confidence level. Also, the standard coefficients of these categories are in the range between 0.738 to 0.955, which indicates the appropriate strength of these categories in the model.

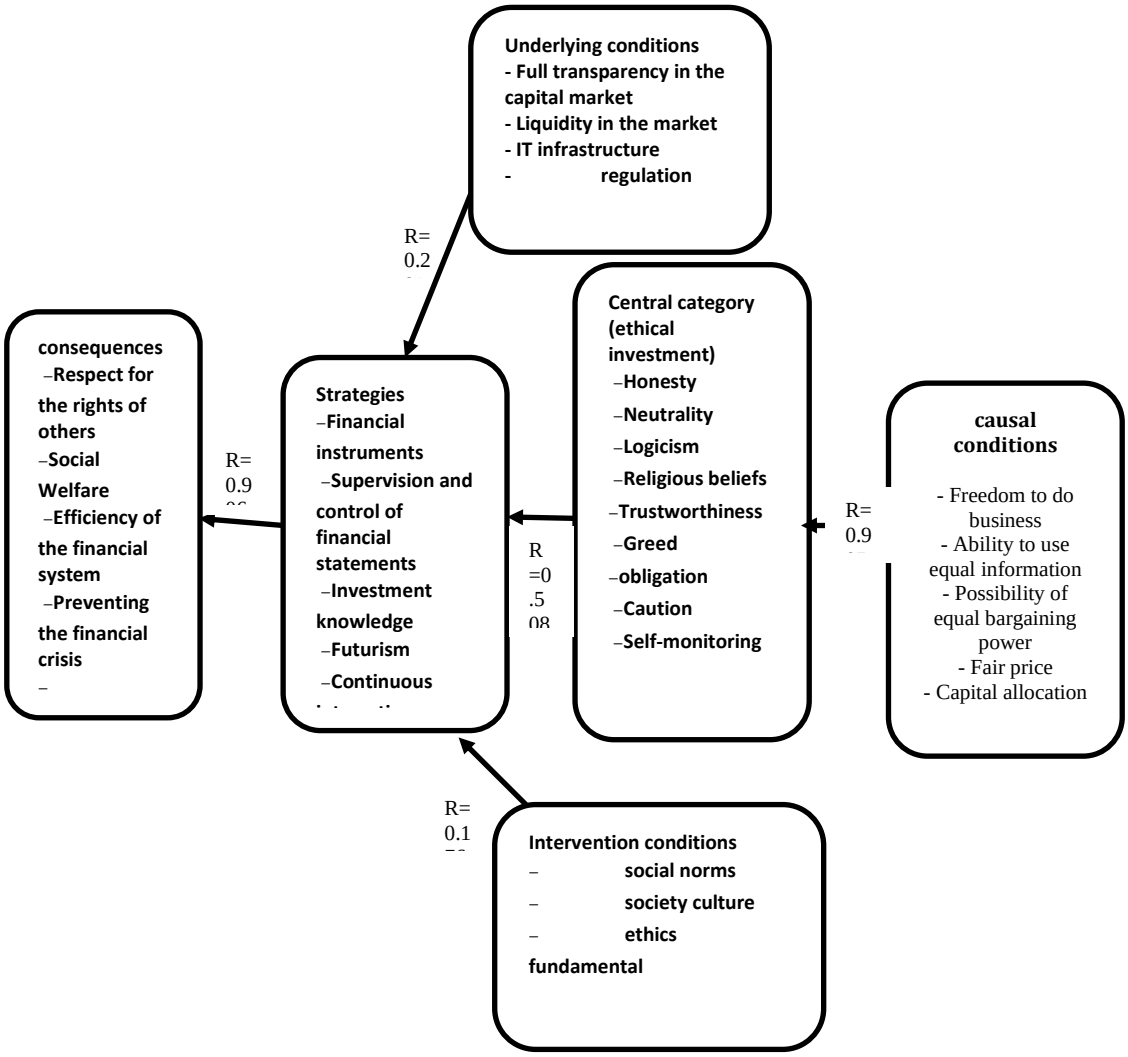
Accordingly, the category of causal conditions has 5 sub-categories of freedom in trading (statistics t=39.400), possibility of using equal information (statistics t= 95.84), possibility of equal bargaining power (statistics t=35.351), fair price and capital allocation (statistic is t=52.657). As mentioned, causal conditions are conditions in which the categories that affect the main category (moral investment) are examined. The central category has 9 sub-categories: honesty (t=32.009), neutrality (t = 34.045), rationalism (t =37.973), religious beliefs (t =38.721), fidelity (t=22.714), greed (statistics t=40.485) is commitment (statistics t=41,485), prudence (statistics t=39.827) and self-control (statistics t=21.669). In fact, the central phenomenon, by being influenced by a set of causal factors, causes interactions and reactions. In this research, the central category is investment ethics, which is realized in spite of the mentioned categories. The category of background conditions has 4 sub-categories of liquidity in the market (statistics t=47.834), full transparency in the capital market (statistics t=63.043), information technology infrastructure (statistics t=29.745) and regulations (statistics t=35.477). Based on what has been said, contextual conditions refer to the set of factors that provide the background for the implementation of the phenomenon in question and affect behaviors and actions. The category of interventionist conditions has 3 sub-categories of social norms (statistics t=30.442), society culture (statistics t=76.374) and ethical principles (statistics t=114.623). Intervening conditions are general conditions that affect the choice of different strategies and can facilitate and accelerate the implementation of strategies. In this regard, it can be said that according to the definition of investment ethics, it is a set of norms that are institutionalized in individual culture and society, so the roots of investment based on ethical principles in society and also among investors are very different. Strategies category has 5 sub-categories of financial instruments (statistics t= 34.472), monitoring and control of financial statements (statistics t=27.759), investment knowledge (statistics t=30.145), foresight (statistics t=49.557) and continuous interaction (statistics t=39.356). These strategies are interactions and reactions that arise from the central phenomenon and their purpose is to provide solutions to deal with the central phenomenon. Outcome category has 5 sub-categories: respect for the rights of others (statistics t=48.922), social welfare (statistics t=74.837), efficiency of financial system (statistics t=114.529), prevention of financial crisis (statistics t=45.944) and environmental considerations (Statistics t=17.415). In general, realizing the ethics of investing in financial crises will bring great benefits to businesses and society.

Question 2: What is the priority of the components of the ethical investment model in the financial crisis?
In this section, Friedman test was used to determine the prioritization of model components. The results are presented as follows:

At the 95% confidence level, the category of "possibility of using equal information" and the category of "community culture" with an average rank of 30.98 have the highest rank, followed by the category of "ethical principles" with an average rank of 26.58. The categories of "environmental considerations" and "precaution" (11/67) have the last rank. Regarding the set of factors that lead to the emergence of investment ethics (category of causal conditions), the category of "possibility of using equal information" has the highest rank (30.98) and the category of "capital allocation" has the lowest rank (11.86). In the central category, the category of "honesty" has the highest rank (25.63) and the category of "caution" has the lowest rank (11.67). In the category of contextual conditions, the category of "full transparency in the capital market" and "regulations" have the highest rank (26.14) and the category of "liquidity in the market" has the lowest rank (12.05). In the category of intervening conditions, the category of "culture of society" has the highest rank (30.98) and the category of "moral principles" has the lowest rank (13.35). In the category of strategies, the category of "investment knowledge" has the highest rank (25.63) and the category of "supervision and control of financial statements" has the lowest rank (11.86). In the category of consequences, the category of "prevention of financial crisis" has the highest rank (13.44) and the category of "environmental considerations" has the lowest rank (11.67).

Question 3: What is the pattern of moral investment in the financial crisis?
Based on the path analysis, the share of each component and sub-components in the model is specified. The obtained components were obtained in the following order:

The value of t-statistic is outside the range (1.96 and -1.96), therefore, at the 95% confidence level, it can be concluded that all relationships are confirmed in the model. Considering that the t-statistic in the path of causal conditions on the axial category is equal to 62.313 and is more than 1.96, it is concluded that the variable of causal conditions has a significant effect on the axial category at the 95% confidence level. Due to the fact that the standard coefficient is 0.905 and more than 0.6, so the causal conditions have a direct and strong effect on the central category. In the direction of the axis category on strategies is equal to 6.505 and is more than 1.96, it is concluded that the variable axis has a significant effect on strategies at the 95% confidence level. Given that the standard coefficient is 0.508 and between 0.3 and 0.6, so the central category has a direct and moderate impact on strategies. Accordingly, in the presence of the categories of honesty, impartiality, rationalism, religious beliefs, trustworthiness, greed, commitment, caution and supervision in the investor, the implementation of strategies to develop investment ethics in times of crisis increases. In the context of contextual conditions on strategies is equal to 3.985 and is more than 1.96, it is concluded that the variable of contextual conditions has a significant effect on strategies at the 95% confidence level. Given that the standard coefficient is 0.292 and less than 0.3, so the background conditions have a direct and weak impact on strategies. In the direction of intervention conditions on strategies is equal to 2.694 and is more than 1.96, it is concluded that the variable of intervention conditions has a significant effect on strategies at the 95% confidence level. Given that the standard coefficient is 0.176 and less than 0.3, so the intervention conditions have a direct and weak impact on strategies. In the path of strategies on outcomes is equal to 60,280 and is more than 1.96, it is concluded that the variable of strategies has a significant effect on outcomes at the 95% confidence level. Given that the standard coefficient is 0.906 and more than 390, so the strategies have a direct and strong impact on the consequences. Based on this, it was found that the categories of financial instruments, supervision and control of financial statements, investment knowledge, foresight, continuous interaction, a strong impact on the desired outcomes, one of the most important of which is the prevention of financial crisis. According to the confirmation of the fit of the studied model in Smart PLS software and the general fit indicators of GOF and Q2 criteria, the desired model of ethical investment in the financial crisis can be presented as follows. Therefore, all indicators confirm the model fit and the proposed model has a suitable fit. That is, the sum of the structural model and measurement have a good quality in explaining the research variables.



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