



Identifying Factors Affecting the Resilience of Iran's Capital Market Based on Meta-Synthesis and Fuzzy Delphi

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ABSTRACT

The current research sought to identify factors influencing the resilience of the Iranian capital market based on metasynthesis and fuzzy Delphi methods. Resilience means the ability to recover, quick recovery, change, buoyancy, elasticity, as well as spring and elasticity properties. A resilient market is one in which prices recover quickly from random shocks. In terms of market resilience, the rate at which prices recover from a possible shock is also important. In fact, in a very resilient market, prices immediately return to their previous level. Therefore, some researchers argue that price inverse estimates can be a natural measure of market resilience. A mixed research design (qualitative-quantitative) was carried out. Therefore, in the first stage, the meta-composite qualitative research method was used to extract the factors affecting the resilience of the Iranian capital market from the relevant literature. The statistical population in the metacomposite section included books, articles and websites related to the research topic (English articles studied in this research from 2000 to 2022 and Persian articles from 2006 to 2022). In the quantitative part, factors affecting resilience were screened by a survey of experts and professors in this field using the fuzzy Delphi method and a questionnaire. The results revealed that the factors affecting the resilience of the Iranian capital market include intramarket structural and technical factors, macro structural factors, legal and regulatory factors, and strategies affecting resilience.

Keywords: Market Resilience, Capital Market, Meta-Synthesis.



1. Introduction

Financial-related literature is full of evidence of anomalies (Fama & French, 2008). The literature review shows that several anomalies' effects have been investigated so far, including presidential elections' results (Pereira et al., 2018), terrorist acts (Tabash et al., 2020), week days (Hossain & Biglari, 2020), accrual items (Papanastasopoulos, 2020), monetary policy (Gali & Gambetti, 2015), the holy month of Ramadan and Muharram (Hosseini et al., 2017), environmental issues (Joo et al., 2017), and the coronavirus pandemic (Mazur et al., 2021). In this regard, the researchers stated that a rational economic person will pursue maximum personal profit, and when a rational economic person comes to the stock market, he becomes a rational economic investor who aims to maximize his profit in the stock market (Al Mamun et al., 2015). However, what happens if those investors act irrationally in the face of market anomalies?

Some researchers (Naibzadeh & Mahmoudi Kohani, 2012; Jafari et al., 2013) stated in response to this question when positive or negative events occur, traders and investors believe that this trend will continue in the long term. Therefore, they overreact to the stock price. For example, if the profit per share of a company shows good growth in the last three quarters, the market will mistakenly assume that this success will continue in the future. Therefore, the stock price is inflated based on this expectation. When the incorrectness of this expectation becomes clear for the market, the reduction of inflation in the stock price begins, i.e. the reversal pattern of the stock price is observable; this phenomenon is called resilience in the stock market.

Resilience means the ability to recover, quickly improve, to change, buoyancy, elasticity, recoil, and elasticity. A resilient market is one in which prices recover quickly from uninformative random shocks. Also, the rate at which prices recover from a possible shock is important. In fact, in a very resilient market, prices immediately return to their previous level. Therefore, some researchers argue that inverse estimation of prices can be a natural measure of market resilience (Olbrys & Mursztyn, 2019). Market resilience answers the very important question of how when traders (especially trades that result from large, inexperienced, and irrational orders) change market prices, leading to temporary price anomalies; they moderate

price errors and prevent a long-term effect through the reactions of professional traders and other market participants (Dong et al., 2007). In fact, in a resilient market, prices tend to easily return to their previous levels after emotional trades (Wanzala et al., 2018).

The stock exchange market is composed of capital, and any research aimed at improving its efficiency is considered important because it is used to concentrate dispersed capital and put it in the service of the development goals of companies and optimal allocation of resources. Therefore, few studies and discussions have been conducted in this regard according to the above-mentioned contents and despite the importance of the effects of market resilience on its ups and downs, especially in developing markets such as the capital market of Iran. In fact, the literature in this field is very newly emerging and growing, and its various aspects have not been explored. Additionally, the investigations show that identification, classification, and screening of factors affecting the resilience of the country's capital market have not been done so far. Therefore, assuming the introduction and presenting the subject above and the associated research gap, the present research deals with this issue and answers the question of what factors affect the resilience of Iran's capital market.

This article is organized as follows. First, it examines the theoretical and empirical background and presents the literature related to financial technology, banking industry, and the relationship between financial technology and banking industry based on previous studies. Second, the methodology used is briefly stated. Then, it presents the findings and finally discusses the results and practical implications of the research.

Theoretical foundations and research background

Resilience is a concept originally proposed in the field of Holling and its stability against changes, and it has gradually been applied in the fields of engineering, psychology, behavioral sciences, and crisis management (Chavoshi & Kabirian, 2020). The application of this concept in the national, economic, and financial fields is mainly related to the last decade. Different definitions of resilience have been provided. Masten (2018) considers resilience as the system's ability to successfully adapt to the basic environmental

challenges that threaten its performance, sustainability, and development. Market resilience can be broadly described as the ability to execute a transaction with the least impact on price, taking into account the elasticity of market supply and demand. It demonstrates how fast prices return to previous levels after change in response to large order flow imbalances induced by noisy traders (Wuyts, 2007). According to Dong et al. (2007), resilience can be plotted in two ways, either in terms of replenishment reorder and price recovery. Using this price recovery approach, resilience can be defined as the speed at which pricing errors caused by temporary uninformative order shocks are corrected or eliminated through market transactions. Resilience can also be defined as how quickly prices return to previous levels after changes in response to large order flow imbalances initiated by uninformed traders (Wuyts, 2007). Therefore, a stock market can be said to be flexible if the order flow quickly adapts to price fluctuations or if it is influenced by factors that force traders to place post-invasion limit orders (Foucault et al., 2005). Resilience addresses a question that is very important to market participants and regulators. For example, when transactions, especially those resulting from relatively large uninformative orders, change market prices and lead to temporary pricing errors, these pricing errors are quickly eliminated through the competitive actions of value traders, sellers, and other market participants (Dong, 2007). Moreover, few past studies on market resilience were mainly devoted to developed economies, prompting the need for similar research studies in developing economies, especially in Iran. Accordingly, the studies conducted in this field, while being case-specific, have somehow helped to increase the growing knowledge and literature in this field. So, an obvious gap can be seen in the literature review. The literature has so far considered different aspects of resilience; what has not been done is their classification and screening in the capital market of Iran. To fill this gap, the current research assumed the identification of factors affecting the resilience of Iran's capital market, focusing on identifying factors affecting resilience and classifying them in the Iranian capital market based on literature review via meta-synthesis method.

Method

Two qualitative and quantitative stages were conducted. In the qualitative stage, the researcher extracted influencing factors on common resilience in the capital market through a systematic literature review using the meta-synthesis method. In the quantitative stage, first, the identified components are surveyed by experts using the survey method and the fuzzy Delphi method in order to screen and localize. Since an applied research was conducted with an inductive approach, the information collection methods and tools consisted of library studies and questionnaires with an exploratory purpose. The design of the statistical population system of this research was done in two parts (meta-synthesis (qualitative) and fuzzy Delphi (quantitative)). In the first step and in the qualitative stage, the statistical population includes books and articles related to the research topic. Hence, a library and Internet search was conducted on the theoretical background related to the research topic in the field of capital market resilience. The library search was conducted according to relevant foreign and domestic books and an Internet search in available online databases such as Web of Science, ProQuest, Business Source Premier, Emerald, Springer, Scopus, Google Scholar, etc. At this stage, a review process is carried out to select a sample of valid articles related to the research objectives, in which the researcher considers various parameters such as the title, abstract, content, article details (journal, year, etc.) and reviews the title of the articles first and removes the articles that do not match the research question and purpose. Then, it examines article abstracts from the previous stage and removes the irrelevant articles. During this process, the number of articles is reduced. The statistical population in the quantitative stage (Delphi section) includes experts in the field of capital market as well as university professors. In the expert survey stage, judgmental sampling was used to select the sample, which is a non-probability method. Having at least five years of experience in the field of capital market resilience, a book, thesis, or at least two valid scientific articles related to the research topic, or relevant university education are characteristics considered for respondents' selection. Finally, 15 participants were selected based on available and willing experts. Fuzzy Delphi technique was also used to validate the results of the qualitative part besides member control (the

researchers checked their findings with four knowledgeable people under investigation, and the researcher's interpretations were confirmed). Accordingly, the screening questionnaires and the final approval of the variables were provided to the experts to express their opinions about the factors collected in the qualitative stage. Language variables (Table 1) were used to design a Delphi questionnaire and collect experts' opinions.

Table 1: Verbal expressions and corresponding fuzzy numbers in fuzzy Delphi

Questionnaire spectrum (fuzzy numbers)	Verbal expression
(0.1, 0.0)	Very low (VL)
(0.3, 0.1, 0)	Low (L)
(0.5, 0.3, 0.1)	Moderately low (ML)
(0.7, 0.5, 0.3)	Moderate (M)
(0.9, 0.7, 0.5)	Moderately high (MH)
(1, 0.9, 0.7)	High (H)
(1, 1, 0.9)	Very high (VH)

In the fuzzy Delphi method, it is assumed that the fuzzy value of each question is displayed as $\tilde{A}_j = (L_j, M_j, U_j)$, where L_j is the lower limit; M_j is the middle limit, and U_j is the upper limit of this fuzzy number:

$$L_j = \min(l_{ij}) \quad i = 1.2. \dots n \quad j = 1.2. \dots m$$

$$M_j = \left(\prod_{i=1}^{n.m} m_{ij} \right)^{\frac{1}{n}} \quad i = 1.2. \dots n \quad j = 1.2. \dots m$$

$$U_j = \max(u_{ij}) \quad i = 1.2. \dots n \quad j = 1.2. \dots m$$

After calculating the fuzzy value of each question, the fuzzy value obtained for each question must first be defuzzified to allow comparison and evaluation for judging each question. The following method was used to defuzzify the fuzzy value of each question:

$$S_j = \frac{L_j + 2 \times M_j + U_j}{4} \quad (1)$$

Finally, the defuzzified value of the questions along with the threshold limit is used to identify the important indicators. In other words, indicators or questions whose defuzzified value is greater than the threshold value are known as important and effective

indicators, and indicators or questions whose defuzzified value is less than the threshold value are removed from the research as less effective or less important indicators. The threshold limit was set at 0.7 by the research team (researcher, supervisors, and advisors), and it was approved by the experts. The choice of value 0.7 was in accordance with the past literature (Zekos, 2021).

Results

Identifying factors affecting the resilience of Iran's capital market based on meta-synthesis

The seven-stage method of Sandelowski and Barros (2007) was used to identify the factors affecting the resilience of Iran's capital market:

Stage one: setting the research questions: The first step of meta-synthesis is setting the research questions. The first question to start meta-synthesis is (What); it is also possible to ask questions meaning What? When? How? What are the main indicators of the studied category? What are the indicators of the studied category? How are the indicators of the studied category related?

Stage two: systematic examination of texts: In this stage, the researcher systematically searched for articles published in foreign and domestic authoritative articles with the aim of determining valid, reliable, and relevant documents in the appropriate time frame. Therefore, the related keywords were selected first. These terms are listed in Table 2.

Table 2: Keywords

English	Persian
Resilience	تاب‌آوری
Capital market resilience	تاب‌آوری بازار سرمایه
Dimensions of capital market resilience	ابعاد تاب‌آوری بازار سرمایه

Some criteria have been considered to extract suitable articles from the mentioned sources using specific keywords; the articles' acceptance or non-acceptance criteria were determined according to Table 3. Also, at the very beginning of the search, the researcher carefully studied the titles of Persian and English articles in databases to avoid receiving unrelated articles in terms of title and to prevent the entry of many unrelated articles for the next stage.

A total of 74 sources (58 English sources and 20 Persian sources) were found for the resilience of the capital market as a result of the search and reviews of the mentioned sources and using the desired keywords and taking into account the acceptance criteria (Table 4).

Stage three: search and review of related articles: after identifying the research keywords, articles containing the keywords are identified. These articles are screened based on the title, abstract, content, and method, and the final articles are extracted. Acceptance or non-acceptance criteria of articles are determined according to Table 5.

Applying the acceptance or non-acceptance criteria, 74 research titles relevant to the study topic were initially studied in the field of capital market resilience after a broad search. Twenty-two articles were screened in terms of title, nine in terms of abstract, and 23 in terms of content, and finally 20 researches remained.

In the next stage, the methodological quality of the studies was evaluated. Glynn's tool (2006) was used to evaluate the methodological quality of the studies. Although there are various checklists for evaluating systematic reviews in meta-synthesis, Glynn's (2006) tool is widely used to evaluate both qualitative and quantitative studies (Catalano, 2013). To assess the methodological quality of the studies based on Glynn's (2006) vital evaluation tool, each research was evaluated based on 10 criteria: research objective, principles and methods, research structure, population and sample, data collection tool, data analysis, reflexivity, basics of professional ethics, research accuracy, general conclusion of research (each criterion having maximum 10 scores). Accordingly, two articles out of 20 articles in the field of market resilience scored below 75% (moderate and weak), excluded from the research process. Figure 1 shows the selection process of the suitable articles and the results.

Table 3: Criteria for the acceptance and non-acceptance of articles in the second stage of criteria acceptance

Non-acceptance criteria	Acceptance criteria	Criteria
Non-English and non-Persian studies	English and Persian studies	The language of research
Research before 2000 AD	Researches published from 2000 to 2022	English studies time
Research before 2006	Researches published from 2006 to 2022	Persian studies time
Personal comments, personal databases	Articles published in reliable publications and databases	Validity of studies
Other than those mentioned	Dimensions, definitions, models, and factors affecting the resilience and irregularity of the capital market	Study topic

Table 4: Number of sources found

No.	Resources	
54	English	Resilience of the capital market
20	Persian	

Table 5: Acceptance or non-acceptance criteria of articles in the third stage

Non-acceptance criteria	Acceptance criteria	Criteria
Titles irrelevant to the study topic	Titles relevant to the study topic	The title of the articles
Abstracts irrelevant to the study topic	Abstracts relevant to the study topic	Abstract content quality
Content irrelevant to the study topic	Content relevant to the study topic	Quality of text content
Review based on Glynn's vital tool, scores below 75%	Review based on Glynn's vital tool, scores above 75%	Methodological quality of the study

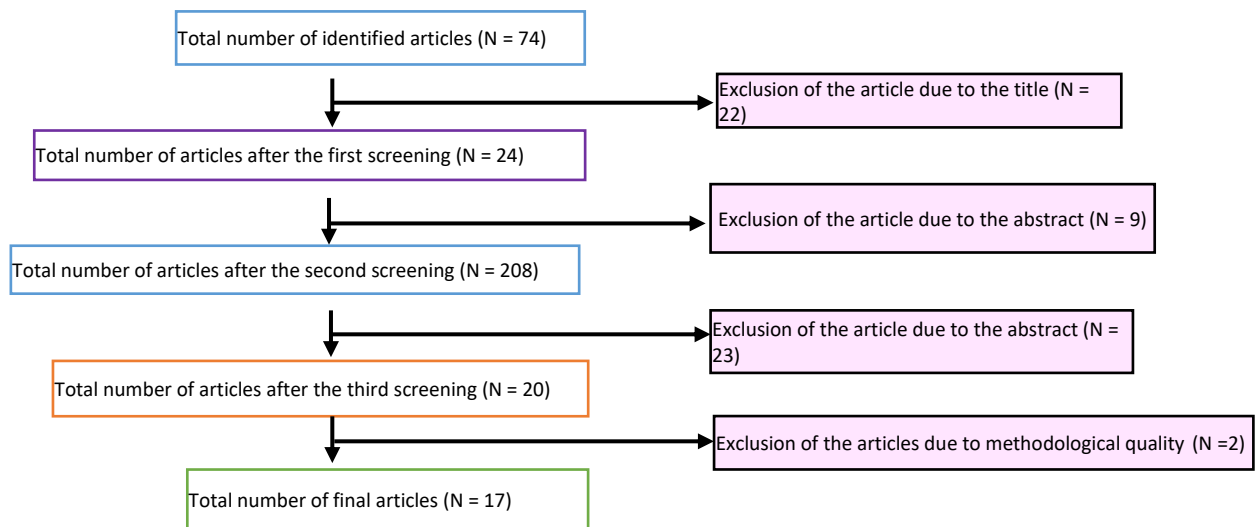


Figure 1: Search results and selection of suitable articles

Stage four: extracting articles' information: the content of the articles was carefully studied and the basic indicators were extracted.

Stage five: analysis and synthesis of qualitative findings: first, all the components extracted from the studies were considered as codes, and then they were categorized into a similar concept considering the concept of each code. In this way, the research

concepts (themes) were formed. During the analysis, topics or themes emerging from studies included in the meta-synthesis were searched. Then, they were grouped into a similar category considering each code's meaning. Hence, dimensions and components were formed. Table 6 lists a sample of sources, concepts, primary codes, and categories.

Table 6: An example of the performance of the initial stage of code classification, resilience

Selected reference articles	Concepts	Initial coding	ID
Category 1: Intramarket structural and technical factors			
Berry et al. (2015)	Diversity in the type and number of financial institutions that occupy different corners of the market by adopting different strategies in the market and their activities complement each other in promoting resilience	Complementary and diverse financial institutions	1
Damar & Molico (2016)	Multiplicity of financial instruments means a sufficient number of a specific type of financial instrument (for example, common stocks) so that investors are faced with several options for diversifying their investment portfolio.	Complementary and diverse financial instruments	2
Barbera et al. (2017)	It is necessary for financial institutions to adhere to legal requirements and risk management framework to reduce the risk of each financial institution, considering their effective role in capital market resilience.	Integrated risk management structure in the capital market	3
Berry et al. (2015)	The regulation of financial institutions in each country helps the resilience of the market. The share of different financial institutions in the flow of capital entering the capital market refers to the pattern of investment concentration in the financial institution.	Centralized model of investment in national institutions	4
Gray (2002)	The quality of a country's financial infrastructure contributes to its ability to deal with unstable financial markets.	Capital market infrastructure	5

Stage six: quality control: the evaluation of studies to include the quality control criteria is perhaps more important than the evaluation of studies to determine the inclusion and relevance criteria. In the meta-synthesis method and in this stage, the following procedures are considered to maintain the quality of selected studies:

- 1) Throughout the research, the researcher tried to go through the adopted steps via providing clear explanations and descriptions for the options available in the research. At the right time, the researcher used established approaches and attitudes to combine the main studies in the qualitative research.
- 2) At the right time, the researcher used established programs, such as Glynn's (2006) critical evaluation tool to evaluate the quality of the original qualitative research studies.
- 3) The researcher used both electronic and manual search strategies to find relevant articles.

- 4) To evaluate the quality of research studies, the researcher used Glynn's (2006) qualitative research evaluation tool, including questions that help to make the studies seem rational.
- 5) In addition to the mentioned cases, the researcher also compared his opinions with another expert to control his extracted concepts. Thus, a number of selected articles were given to one of the experts, and the results were evaluated through raters' reliability index. The value of the calculated coefficient was 83%.

Stage seven: extracting the information of the articles:

In this stage, the findings obtained from the previous stages are presented. In this stage of meta-synthesis method, the findings from the previous steps are presented. A summary of the grouping of dimensions and components extracted from the literature related to the research topic are summarized and presented (Table 7).

Table 7: Summary of the findings of meta-synthesis, capital market resilience

Reference article selected	Concepts	Initial coding	ID
<i>Category 1: intramarket structural and technical factors</i>			
Explanation: structural and technical factors are among the internal parameters that can be controlled by the system, which affect the resilience of the capital market.			
Berry et al. (2015)	Diversity in the type and number of financial institutions occupy different corners of the market by adopting different strategies in the market, and their activities complement each other in promoting resilience.	Complementary and diverse financial institutions	1
Damar & Molico (2016)	Multiplicity of financial instruments means the existence of a sufficient number of a specific type of financial instrument (for example, common stocks) so that investors are faced with several options for diversifying their investment portfolio.	Complementary and diverse financial instruments	2
Barbera et al. (2017)	It is necessary for financial institutions to adhere to legal requirements and risk management framework to reduce the risk of each financial institution, considering their effective role in capital market resilience.	Integrated risk management structure in the capital market	3
Berry et al. (2015)	The regulation of financial institutions in each country helps the resilience of the market. The share of different financial institutions in the flow of capital entering the capital market refers to the pattern of investment concentration in the financial institution.	Centralized model of investment in national institutions	4
Gray (2002)	The quality of a country's financial infrastructure contributes to its ability to deal with unstable financial markets.	Capital market infrastructure	5
<i>Category 2: macro structural factors</i>			
Explanation: structural and macro factors are among the external parameters outside the control of the system that affect the resilience of the capital market in addition to the internal factors of the capital market.			
Korostelkina et al. (2020)	The structure of the financial system in the two parts of the banking system and the capital market determines the type of influence of each of them in the financial system and ultimately their impact on financial resilience. Debt-oriented shocks generally have a more damaging effect than market-oriented shocks and, if they occur, are more likely to have cross-market contagion. Also, in recent years, the connection between the banking system and the capital market has increased through complex financial instruments.	The structure of the country's financial system	6

Reference article selected	Concepts	Initial coding	ID
Lee & Chen (2021)	Government instability, corruption, severe political violence, civil war, and high bureaucracy are among the political risks that affect the resilience of the capital market.	Political factors	7
Bruni & Lopez (2019)	Monetary policies affect price stability and economic growth through the channel of changing interest rates and the volume of money supply. Capital market financial instruments are sensitive to these changes. Therefore, spillover factors on financial resilience should be considered in the implementation of monetary policy.	Monetary policies	8
Venardos (2010)	The stability of economic growth (especially in the real sector) reduces the number and intensity of exogenous shocks affecting the stability of the capital market. Conversely, financial development affects the quality of economic growth.	Stability of economic growth	9
Amini et al. (2016)	The possibility of a crisis in a certain part of the market and its rapid spread to other parts and the collapse of the whole market are likely. This type of risk occurs when one of the influential players in the market is unable to fulfill its obligations, and when this happens, other related players face problems and the crisis spreads from one institution to another, from one market to another, and even spreads from one country to other countries.	Intermarket factors	10
<i>Category 3: Legal and regulatory factors</i> Explanation: legal and regulatory factors are among the internal parameters that can be controlled by the system that affect the resilience of the capital market.			
Allen et al. (2017)	Supervision of financial markets to improve resilience can be centralized and implemented through a specific institution or decentralized, based on factors such as specific types of financial institutions, specific types of financial markets, systemic risk, or type of financial activity.	Existence of appropriate laws to monitor the capital market	11
Allen et al. (2017)	The regulatory institutions of the financial system have two main and intertwined roles; one in connection with the implementation of laws and regulations and the other in the field of monitoring market players relying on the spirit of the law. Laws and regulations are formulated to protect the rights of investors, ensuring the existence of a transparent, efficient, and fair market and reducing systemic risk.	Regulatory institutions overseeing laws and regulations	12
McDonough (2003)	Transparency in financial affairs is the best option to increase resilience. Proper disclosure of information increases market efficiency and gains investors' trust.	Information transparency	13
<i>Category 4: Effective strategies on resilience</i> Explanation: The capital market is facing irregularities; it needs strategies to improve resilience.			
Berry et al. (2015)	The capital market's ability in not producing shocks of internal origin is effective for resilience, for example, due to non-compliance with risk management guidelines, inappropriate disclosure of information, operational risks leading to irregularity, and adapting, modifying, or changing characteristics, and actions to reduce possible losses in the future and to take advantage of upcoming opportunities.	Failure to produce or adapt to shocks of internal origin	14
Sahay et al. (2015)	The ratio of the capital market value to the total gross national product is called the capital market penetration rate. Financial development generally increases resilience and strengthens the economy.	Increasing market penetration rate	15
Chavoshi & Kabirian (2020)	The announcement of issuers' credit rating reduces information asymmetry and related risks. Also, the presence of companies with a suitable credit rating in the capital market attracts the trust of investors and impedes shocks caused by issuers in the market.	Credit rating of publishers	16
Musavi et al. (2020)	Criteria such as the number of traded shares, the number of transactions, the volume of transactions, and the stock turnover rate are significantly correlated with the stocks resilience.	Liquidity promotion	17

Validation of research model components

A questionnaire and the fuzzy Delphi method were also used to validate the results of the interviews and confirm the model components, and use financial derivative instruments in the direction of risk management. So, an initial questionnaire was designed, and then the final version was designed and the research experts were asked to express their opinion regarding the indicators identified based on the interview and also add other possible factors to the list after revising the initial questionnaire using the opinions of professors and experts.

At this stage, the questionnaires distributed among the experts were first collected. After collecting 10 completed questionnaires, the aggregation and defuzzified value of each question was calculated. The

calculations related to finding the fuzzy value of each question and its defuzzified value along with their related relationships are presented in the method section. The Cronbach's alpha value of the Delphi questionnaire was also obtained as follows; the Cronbach's alpha value of the questionnaire (0.82) is higher than 0.7. Table 8 summarizes the opinions of 15 experts for the Delphi questionnaire.

Table 9 presents the fuzzy and defuzzified values of each question.

The results of Delphi questionnaire calculations are presented in Table 9. The defuzzified value of all components is higher than the threshold value (0.7), so the four components or questions of the Delphi questionnaire were approved by the research experts, and no new variable was proposed; hence, the Delphi process ended.

Table 9: Summarizing the opinions of experts for the Delphi questionnaire

No. of experts	Importance spectrum							Research questions (components)	Dimensions	No.
	Very high	High	Moderately high	moderate	Moderately low	Low	Very low			
	11	3	1					Intramarket structural and technical factors	Capital market resilience	1
15	13	2						Macro structural factors		2
15	12	2	1					Legal and regulatory factors		3
15	12	2	1					Effective strategies on resilience		4

Table 10: The results of the analysis of the questionnaires using the fuzzy Delphi method

Result	Defuzzy	Fuzzy value of each question			Research questions (components)	Dimensions	Abbreviation symbol
		U	M	L			
Confirmed	0.853	1	0.956	0.5	Intramarket structural and technical factors	Capital market resilience	1
Confirmed	0/918	1	0.986	0.7	Macro structural factors		2
Confirmed	0/856	1	0.963	0.5	Legal and regulatory factors		3
Confirmed	0/856	1	0.963	0.5	Effective strategies on resilience		4

Conclusion and suggestions

The present research was carried out in an effort to identify the influencing factors on the resilience of the Iranian capital market based on meta-synthesis and fuzzy Delphi. Resilience provides fundamental insights into the speed at which the marginal effect of price increases as trading volume increases in the stock market. In other words, when there are positive or negative events and general disorder in the market, traders and investors believe that this trend will continue in the long term. Therefore, it overreacts to

the stock price. When the incorrectness of this expectation is determined for the market, the reduction of inflation in the stock price begins, that is, the pattern of the reversal of the stock price can be seen; This phenomenon is interpreted as resilience in the stock market. However, very little empirical research has been devoted to the study of these issues. Considering the importance of the research problem, literature review, and research background, there was a need to identify and categorize factors affecting the resilience of the Iranian capital market since the researcher

concluded that the past researchers did not have a significant consensus regarding the definition, types, and dimensions of factors affecting the resilience of Iran's capital market in the initial steps of the research and according to his initial studies in the field of the research topic. Investigations showed that some experts believed that the main reason for not realizing such a consensus was the lack of proper attention to the multifaceted nature of resilience. Therefore, it seemed necessary to adopt combined methods that could make past research results systematic and help the researchers to find regular patterns. Hence, the relatively new meta-synthesis approach was selected to identify factors affecting the capital market resilience, which has not yet been widely used in this field and could be a valuable tool to facilitate the identification of components through systematic synthesis. In fact, the meta-synthesis method in this research has made it possible to comprehensively identify and categorize, covering all previous researches, via integration and synthesis of all previous irregularities (without removing any specific criteria) and the subject literature, at the same time screening factors affecting resilience in the previous studies in the country's capital market, using the fuzzy-Delphi method.

According to the results and what was obtained in the course of the study, it can be argued that the structural and technical factors in the market, which are among the internal parameters controllable by the system, affect the resilience of the capital market. Financial complementary and diverse institutions are among the structural and technical factors in the market. In fact, diversity in the type and number of financial institutions occupy different corners of the market through adopting different strategies in the market, and their activities complement each other in promoting resilience. Another factor is complementary and diverse financial instruments since financial instruments' diversity means the existence of a sufficient number of a certain type of financial instrument (for example, common shares) so that investors are faced with several options for diversifying their investment portfolio. The third factor is the integrated risk management structure in the capital market. Therefore, it is necessary for financial institutions to adhere to the legal requirements and risk management framework to reduce the risk of each financial institution, considering their effective role in capital market resilience. The fourth factor is the

centralized pattern of investment in financial institutions. In fact, the regulation of financial institutions in the country contributes to the market resilience. The share of different financial institutions from the flow of capital entering the capital market refers to the pattern of investment concentration in the financial institution. And the fifth factor is capital market infrastructure. Thus, the quality of a country's financial infrastructure contributes to its ability to deal with unstable financial markets.

Moreover, along with the internal factors of the capital market, structural and macro factors are among the external parameters out of the system control that affect the capital market resilience. The structure of the country's financial system is a macro and structural factor that affects the resilience of the capital market in Iran. The structure of the financial system in two parts, the banking system and the capital market, determines each type's influence on the financial system and their impact on financial resilience. Debt-oriented shocks generally have a more damaging effect compared to market-oriented shocks and will be more likely to have cross-market contagion if they occur. Also, the connection between the banking system and the capital market has increased through complex financial instruments in recent years. The second category consist of political factors. In fact, the instability of the government, corruption, severe political violence, civil war, high bureaucracy are political risks that affect the resilience of the capital market. The third factor is monetary policies. Monetary policies affect price stability and economic growth through the channel of changing interest rates and the volume of money supply. Capital market financial instruments are sensitive to these changes. Therefore, its spillover factors on financial resilience should be considered when applying monetary policy. The fourth factor is the stability of economic growth, according to which the stability of economic growth (especially in the real sector) leads to a reduction in the number and intensity of exogenous shocks affecting the stability of the capital market. Conversely, financial development affects the quality of economic growth. The fifth factor includes inter-market factors. Therefore, it can be argued that there are the possibilities of a crisis occurring in a certain part of the market and its rapid spread to other parts and the collapse of the whole market. This type of risk occurs when one of the influential players in the market is unable to fulfill its

obligations. When this happens, other related players face problems, and the crisis spreads from one institution to another, from one market to another, and even spreads from one country to other countries. Furthermore, according to the research results, legal and regulatory factors are among the internal parameters that can be controlled by the system, affecting the resilience of the capital market, among which is the existence of appropriate laws to monitor the capital market. Therefore, the regulation of financial markets to improve resilience can be centralized and implemented through a specific institution or decentralized based on factors such as specific types of financial institutions, specific types of financial markets, systemic risk, or the type of financial activity. The second factor is the existence of an institution that supervises laws and regulations. The regulatory institutions of the financial system have two main and intertwined roles: one in connection with the implementation of laws and regulations and the other in the field of monitoring market players relying on the spirit of the law. Laws and regulations are formulated with the aim of protecting the rights of investors, ensuring the existence of a transparent, efficient, and fair market and reducing systemic risk. The third factor is information transparency. Therefore, financial transparency is the best option to increase resilience. Proper disclosure of information increases market efficiency and earns investors' trust.

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