



RANKING OF HEDGING TOOLS FROM THE PERSPECTIVE OF TEHRAN STOCK EXCHANGE INVESTORS

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ABSTRACT

This paper prioritized the hedging tools using Analytical Hierarchy Process. The research is an applied research in terms of purpose and is kind of heuristic research in terms of method. In this research, opinions of Tehran Stock Exchange experts were collected using a questionnaire that was organized based on methods of Delphi and Analytical Hierarchy Process. In the questionnaire, experts assessed hedging tools (Forward contracts, Futures contracts, Option contracts, Swap contracts and Mutual Funds) and their evaluation criteria. Data has been analyzed using Expert Choice software. Final analysis of the most appropriate hedging tool showed that future contracts and then option contracts had the highest importance, respectively. Mutual funds, swap contracts and forward contracts placed in next ranks.

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Keywords: Hedging, Forward contracts, Futures contracts, Option contracts, Swap contracts, Mutual funds, Tehran stock exchange.

Contribution/ Originality

This study is one of very few studies - may be the only one, which have investigated the most suitable tools for hedging risk in an emerging market. Meanwhile we contributed to the most important criteria for this purpose by means of Delphi method for financial experts and investors and its weights.

1. INTRODUCTION

Hedging is a method to safeguard or minimize loss from risk that constantly exists in the financial market. Nevertheless, hedging in conventional perspectives involves the usage of

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derivative instruments (Ahmad and Afifi Ab Halim, 2014). Derivatives are financial instruments whose prices are dependent upon or derived from one or more underlying financial assets (Gurusamy, 2004; Hull, 2007). Derivatives have no intrinsic value rather their value is determined by fluctuations in the prices of underlying assets.

Gupta (2006) states that the underlying assets or instruments can be equity shares, stocks, bonds, debentures, treasury bills, foreign currencies or different market indices such as stock market index, consumer price index, etc. For example, a stock option's value depends upon the value of a stock on which the option is written. Similarly, the value of a treasury bill of futures contracts or foreign currency forward contract depends upon the price or value of a Treasury bill or foreign currency. These instruments have been designed to provide protection for participants in financial markets against adverse movements in the prices of the underlying assets (Kevin, 2007).

Gupta (2006) describes that a forward contract is a simple customized form of derivative instruments. It is a contractual obligation between a buyer and a seller at time 0 to buy or sell a specified quantity of an asset, which can be of any kind, at a certain future date for a certain price (Hull, 2007; Saunders and Cornett, 2007). The price of a forward contract remains fixed over the life of the contract.

Saunders and Cornett (2007) and Hull (2007) define that a futures contract, like a forward contract, is an agreement between a buyer and a seller at time 0 to deliver a specified asset at a certain time in the future for a certain price.

An option is a contract that gives the holder the right, but not the obligation, to buy or sell an underlying asset at a predetermined price for a specified period of time (Gupta, 2006). A swap is an agreement between two parties to exchange a sequence of specified cash flow over a period of time in the future (Hull, 2007).

The main purposes of this research are as follows: investigation and recognition of hedging tools, determination of appropriate criteria for prioritizing these tools and prioritization of hedging tools proportional to policies and goals of investors using hierarchical analysis process. Since risk phenomenon is one of the most important and vital features of decision making in investment area, related affairs to financial markets and different kinds of economic activities, hence investors in financial markets always face with risks and its related dangers. These fluctuations and lack of confidence about future condition caused severe loses and even their going out investors from market and lack of desire of other investors for entering in to this area. As a result, all of market activists should follow the ways of covering different kinds of existing risks in order to reduce their own expenditures or costs. For this purpose, risk management tools have been introduced that are used widely in valid capital markets in the world; in this markets, professional dealers could control powerfully and flexibly their own investments with exploitation from unique capabilities of these tools. Awareness and recognition of these kinds of tools and finally their definition and application in the capital market of Iran, will allow the actors of this market to better control their own investments and its following higher comfort from entering and activity in this market. Some of the secondary purposes of this research are as follows: the need for more rich researches that were

done in this area, informing investors about introducing and ranking hedging tools that are appropriate for investors in capital market for investment of investors with much confidence in capital market.

2. LITERATURE REVIEW

We can claim without exaggeration that one of the most important and largest proposed discussions in financial literature of the world is hedging argument. Among the tools that are used for hedging and reducing the dangers or risks of fluctuations of capital market and also value fluctuations of financial investments of one capitalist, we can refer to related arguments about creation of Mutual Funds for micro capitalists and application of derivative tools (Tehrani and TagiPour, 2005). These derivatives can be classified to four groups: A: Forward contracts; B: Future contracts; C: Option contracts and D: Swap contracts.

Few researches have been performed on hedging. And most of the performed researches have only focused on some aspects of risk reduction without attention to design and the way of application of hedging tools.

Bodnar and Gebhardt (1999) conducted a comparative study of derivative usage among US non-financial firms and a companion survey (1997) on German non-financial firms. It is not a mere comparison of the results of both studies, but a comparative study, drawing a comparable subsample of firms from the US study to match the sample of German firms on both size and industry composition. We find that German firms are more likely to use derivatives than US firms, with 78% of German firms using derivatives compared to 57% of US firms. Aside from this higher overall usage, the general pattern of usage across industry and size groupings is comparable across the two countries. In both countries, foreign currency derivative usage is most common, followed closely by interest rate derivatives, with commodity derivatives a distant third. In contrast to the similarities, firms in the two countries differ notably on issues such as the primary goal of hedging, their choice of instruments, and the influence of their market view when taking derivative positions. These differences appear to be driven by the greater importance of financial accounting statements in Germany than the US and stricter German corporate policies of control over derivative activities within the firm.

Yang (2001) calculated coverage rate for future contracts of derivative markets of Australia using four models and in three time horizon of one day, five day and twenty day, and concluded that error correction model have better performance and efficiency of models also increase with prolongation of time periods. In this paper, efficiency has been measured in two states of inside-sample and outside- sample.

Stulz research Stulz (2004) showed that derivative tools allow companies and individuals to cover risks and tolerate risk efficiently. These derivatives can be risky for companies especially when the corporate or company is inexperienced in using them or it is using these derivatives accidentally. Based on results of Stulz research, companies and individuals should not fear from application of hedging tools, provided that they have awareness from potential advantages and

disadvantages of these tools. Also, corporate and individuals should be confident of appropriate and correct application and using of risk coverage tools, i. e, risks should be measured and understood completely.

The survey by [El-Masry \(2006\)](#) in U.K. non-financial firms concerning fiscal year 2001 verifies that larger firms use derivatives more often than medium and small size firms, while derivatives usage is more extensive in multinational firms. Half of the derivatives non-users claim lack of sufficient exposure to risks and seem to worry about the perception of hedging by analysts and investors. Risk management activities of derivatives users appear to be a centralized issue, the foreign exchange risk seems to be a more common hedging objective compared to interest rate risk and the lack of sufficient knowledge concerning derivatives appears to create the most concern among contract users.

[Molis Sprcici \(2007\)](#) has analyzed different methods of financial risk management and derivatives usage in large Croatian and Slovenian non-financial companies. The correlation analysis of Pierson correlation coefficient and results of independent sample t-test showed significant statistical difference among risk management methods in Slovenia and Croatian corporates. Based on the results of performed researches, forwards and swaps are by far the most important derivative instruments in both countries. Futures as representatives of standard derivatives together with structured derivatives are more important in the Slovenian than in the Croatian companies, while exchange-traded and OTC options are unimportant means of financial risk management in both countries.

[Xinfan and Xinyan \(2008\)](#) in your paper investigated the hedging performance of both the HSIF (Hang Seng Index Futures) and HHIF (Hang Seng H-shares Index Futures) contracts using daily data for the period January 2004-June 2005. The hedged portfolios consist of market indices and unit funds. The dynamic OLS-modeled strategies and EWMA-modeled hedging strategies for both 63-day and 126-day estimation windows are compared. The results show that (1) compared to the HSIF contract, the HHIF contract is an important additional hedging instrument; (2) the EWMA model is slightly superior to the dynamic OLS model generally; (3) the cross-hedging effectiveness for actual spot portfolios to be hedged appears to be much lower than that for market indices.

[Martin et al. \(2009\)](#) stated that financial derivatives markets have reached a remarkable development in recent years, but this pattern has not attained the same strength in developing countries. In consequence, an important question arises: what is the development degree of financial derivatives markets in emerging countries and which variables influence the use of derivatives in the top companies? To analyze this topic, Peru has been chosen as a reference and the Non-Financial Firms as well. In order to enhance objectivity, an empirical study has been conducted through a structured survey directed to chief financial managers of companies classified among the TOP 1000 in the country. This information was collected in order to explain the effect of the determinants that influence the development of financial derivatives in Peru. The results show that the use of derivatives in Peru is low and the relevant factors affecting its development are

the degree of training in derivatives and the market regulation. This outcome suggests that there should be patterns of behavior for market agents and government entities to promote the use of derivatives, as well as provide information for future research that might contribute to establish the most adequate mechanisms for market-development purposes.

Pavlov and Yang (2011) have investigated hedging in gold future market in India and China. In this study, researchers have evaluated hedging optimal rate of minimum Variance through dynamic and static ways using econometric methods. Result of this research showed that gold future market of China has low efficiency than gold future market of India. Consequently, gold future market in China and India need dynamic hedging tools for capitalists in this market.

Qin and Li (2011) stated that capitalists of security exchange market want to eliminate risk or obtain profit by transaction strategies and using options and stock base property. They defined expected return of transaction strategies in phase financial market by structure or framework of validity theory and obtained the form of integral calculation or computation for expected return of each strategy. These strategies include coverage strategies such as adopting transaction position on one option of stock transaction and or strategies of combination of stock transaction option with cash stock transaction and asymmetric transaction strategies.

Caracota and Paun (2012) have used Markowitz's measure to determine the effectiveness of hedging strategy which measures the efficiency in relation to reducing the standard deviation of portfolio return. This study aimed to analyze the efficiency of hedging on futures market on securities and to identify the relationship between spot and futures markets in Romania. The data used in this study consist of 1,243 daily observations, concerning the evolution of stocks SIF5 and Futures SIF5 between 02.04.2007 - 30.03.2012. Result of this research show that portfolio risk management reduce not only risk but also profitability. Therefore, immunization with purpose of risk management has no additional profit.

Ehsan (2012) investigated legality of financial derivatives based on Islamic commercial law and confidence from demand for risk management tools in different Business and industrial departments in Pakistan in his own dissertation. To conduct this research, 600 questionnaires have been distributed randomly among active organizations in industrial and business sections in Pakistan. Result of this research showed that demand for collateral, Future contracts and guarantee for credit risk management is demanded due to market risk management of forward contracts, Future contracts, and future contract of foreign exchange rate, future of foreign exchange and foreign exchange options is demanded for reduction of risk of foreign exchange rate.

Kozarevic *et al.* (2012) have determined the scope of the use of derivatives by companies in Bosnia and Herzegovina for specific purposes of financial risk management. The paper aims to give suggestions to BiH companies for improvements of their risk management practices in order to ensure more efficient and effective financial risk hedging by using derivatives, primarily available through bank son BiH financial markets. This research will be conducted on the data provided by the Foreign Trade Chamber of BiH, financial statements of the chosen companies, the Banking Agency of the Federation of BiH, the Banking Agency of Republic of Srpska, BiH banks,

and other government and non-government organizations. According to the surveyed results, the biggest interest amongst bank clients is for currency forwards, with the average grade 2.33, then for currency swaps (2.20) and the smallest for the interest rate swaps (2.00). Further, information provided by the users of derivatives (via informal communication) revealed that the major reasons for low usage of derivative instruments are lack of information about the procedure of derivatives use and lack of knowledge about potential benefits of these instruments in the domain of risk management. Also, the major limiting factor of larger derivatives use can be attributed to a relatively low number of business operations of BiH companies on the global market.

Ahmad and Afifi Ab Halim (2014) in own research stated that principal purpose of hedging that is to manage risk has been misunderstood as only to gain profit. The concept of hedging needs a further discussion because of its various interpretations on the meaning of hedging. Hence, the aim of this study is to discuss the general concept of hedging and subsequently the concept of hedging according to Islam. The approach used in this study of content analysis is the qualitative research method of document analysis. The study finds that the concept of hedging according to Islam is different from the conventional concept of hedging. In addition, the objective of Islamic hedging to reduce risk must only be related to real economic activities.

Research that have been performed about investment funds are related to performance of these funds that we point to some cases in this regard in the following section:

Huang *et al.* (2011) have performed a research in Aston city with title of « Risk shifting and mutual fund performance ». These researchers found that fund risk levels had significant changes during time. Their research considered that whether changes of risk had had an effect on fund performance. Using criterion based on maintenance of risk transfer, they concluded that funds that had variable or changeable risks levels during time and their risk change from one level to another level regularly, have more poor performance than funds that maintained fixed own risk during time.

Sachdeva *et al.* (2013) investigated the effect of behavioral – financial components on choose of mutual funds. Based on this research, capitalists consider factors such as investment risk, reputation of fund, required liquidity and capital immunity during choosing a fund.

There has not been performed any special research on recognition and introduction of hedging tools for capitalists of security exchanges, but researches have been performed on feasibility of application of hedging tools and effective factors on employment of these tools that some of them presented here:

Abdol Ali Zadeh (2005) has performed a research with title of «investigation feasibility of employment future delivery contracts on financial securities in Tehran Securities Exchanges». In this research, with assuming possibility of employment future delivery contracts in Iran capital market in terms of Islamic law and based on previous researches, has investigated feasibility of employment this new financial tool based on structure of Tehran Securities Exchanges and capitalists welcome. Results of this research showed that investment corporates are interested in using future contract on stock and stock index in Tehran Securities Exchanges. Macro structure of countries such as America and England has been considered as countries that this contract had had

special prosperity and Malaysia country as developing country for investigation of structure of Tehran Securities Exchanges in order to designing this tool and then mechanism of doing transactions has been analyzed in London, Chicago and Coalalampour.

Finally, considering standard mechanism of doing transactions in future delivery exchanges, result of this research indicate that we can employ this contract in Tehran Securities Exchanges due to recent evolutions and decisions of exchange organization managers about change of transaction software in terms of structural- technical.

Yahyazadeh and HasanNezhad (2006) in their own paper with title of «feasibility of employment option in Iran capital market» have investigated conceptual dimensions of option in Iran capital market from two aspects or dimensions of technical- structural and market assessment. The required information for investigation of market assessment of option in Tehran Securities Exchanges has been gathered through questionnaires using simple random sampling from investment corporates and required information for investigation of structure of Tehran Securities Exchanges from dimension of technical- structural for using from option has been gathered by interview with authorities and experts of capital market.

The obtained results from research hypothesis test showed that investment corporates are interested in using stock option and index option in Tehran Securities Exchanges and also there is possibility of employment option in Tehran Securities Exchanges.

Talebnia *et al.* (2012) in their research entitled «ranking effective factors on employment derivative securities in Iran financial market using from hierarchical analysis process method» investigated the importance of different effective factors on employment of derivative securities in economic environment of Iran country that first, effective factors on employment of derivative securities in Iran financial market were identified for ranking main factors and then they were ranked using hierarchical analysis process method.

In this research, the effect of different factors has been investigated in four general groups such as structural and technical factors, religious jurisprudence factors, related factors to investors and legal factors in employment derivative securities in Iran financial market, using hierarchical analysis process method and has been ranked in terms of importance. Based on results of this research, effective factors on employment of derivative tools in Iran financial markets in priority order are as follows: legal factors, related factors to capitalists, religious jurisprudence factors and structural and technical factors.

2.1. Research Question

Which are the appropriate hedging tools for Tehran Securities Exchange investors respectively?

The hedging tools proposed in this research as follows: 1. Forward contracts, 2. Future contracts, 3. Option contracts, 4. Swap contracts and 5. Mutual funds.

3. RESEARCH METHODOLOGY

This research is an applied research in terms of purpose and is kind of heuristic research in terms of method. The research design is qualitative. It is chosen because it does not involve any statistical and numerical data. In first stage, for performing this research, hedging tools and important criteria in prioritization of hedging tools has been identified for full understanding concept and identification of dimensions and components of research question by library studies that obtained result of this stage were identification 5 tools of hedging and 6 criteria that these criteria were derived from features of hedging tools. Due to nature of subject matter and partial employment of hedging tools in a known country, the best way for obtaining proper result, is use from opinions of experts in this regard. For this reason, Delphi Model has been used as a model that can answer to research question with gathering and analyzing expert's opinions (Powell, 2003). Based on it, primary list was introduced that were consisting of 12 people of exchange experts. The next step was participation attraction of candidates for participating in research that should be done separately and face to face as possible. The separate meeting has been organized with these experts individually. In these meetings, purpose and subject of research and information such as cycle numbers and needed time for every cycle has been presented to them. Finally, only 7 people participated in all stages of research completely because of specialized nature of this subject matter and required time for this research. Therefore, Delphi questionnaire distributed and gathered in 3 rounds for surveying and ranking after identification of criteria by library studies for determination of importance degree and having amount or rate of these features by every hedging tools. Based on obtained results from Delphi questionnaire, all 6 criteria such as transaction capability in OTC (over-the-counter), transaction capability in exchange, liquidity capability, need for payment of cash, exact and known rules for doing transactions, having risk of not performing obligation or responsibility have been accepted as final criterion. Then, couple comparison questionnaire has been designed and distributed among 12 people of managers of Tehran Stock Exchanges for weighing and prioritizing criteria and selected options. In this research, it is used from hierarchy analysis method for comparative assessment and determination of the most appropriate hedging tools. Hierarchy analysis process is a modern technique for group decision making that analyze management problems by using from systematic method and in based on exact and definite data (Saaty, 1980).

Criteria
Transaction capability in OTC (Hull, 2005)
transaction capability in exchange (Hull, 2005)
need for payment of cash (Raei and Pouyanfar, 2004)
liquidity capability (Wyss, 2004)
Having exact and known rules for doing transactions (Kolb, 1997)
Having risk of not doing obligation (Hull, 2005)

Hierarchy tree for this research has been presented in figure1. First level of the tree is decision objective. Intermediate levels, criteria for effective decision-making and the final level are

decision-making options. Most important part in this process is selection of criteria and factors influencing of objective decision making. Therefore, the most important criteria that can help to rank hedging instruments were recognized with study of research literature and surveying from experts in Tehran Stock Exchange. Then main criteria and criteria weights were determined based on couple comparisons.

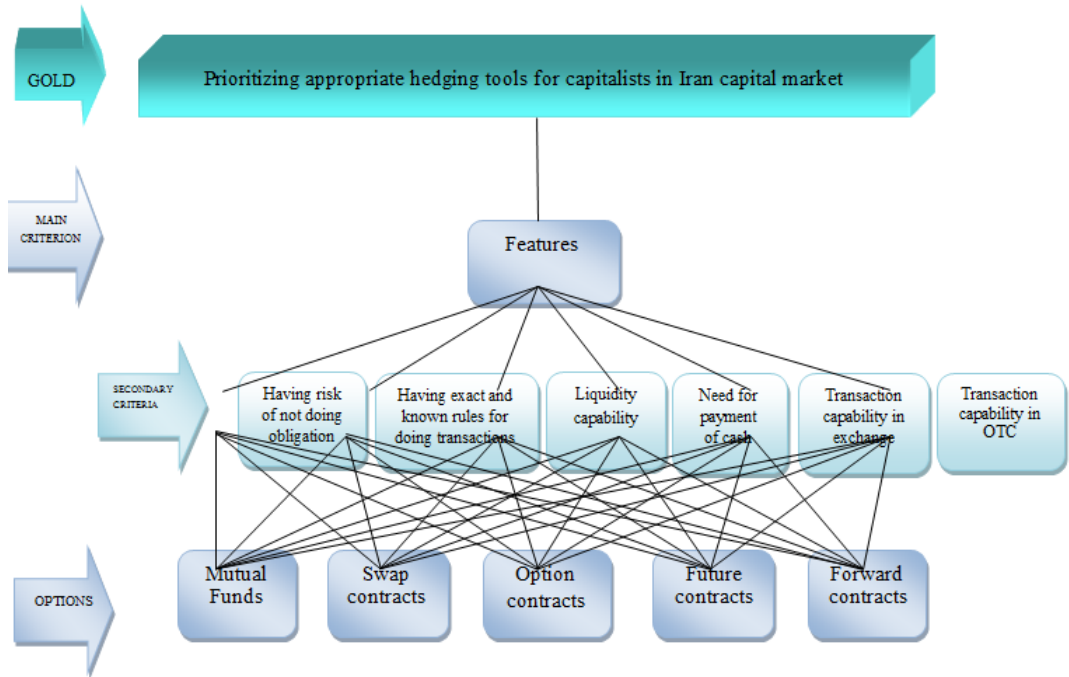


Figure-1.

3.1. Statistical Community

Statistical community should be comprehensive and hindrance, i. e it should be such that include all considered sections or units in terms of locality and time (Sarmad, 2006). Since multi-criteria decision making methods and especially hierarchical analysis process method has been designed for surveying from experts, hence statistical community of this research has been limited to managers of Tehran Security Exchanges that have sufficient and necessary information about research subject. Numbers of these persons were 12, based on recognition of training sector of Tehran Security Exchanges, that have sufficient experience and performance about confident hedging tools in terms of scientific, practical and researcher has collected their opinions by surveying. Therefore, it was attempted to use the maximum number of experts available in this research.

3.2. Data Gathering

The following methods have been used for gathering the information:

1) Library method: Most of the concepts and information used in this research, has obtained from studying books and specialized papers on this issue. Also, the researcher has used websites and

Persian and English books and papers for gathering information. 2) Field method: In this method, questionnaire technique has been used for gathering information. Delphi questionnaire has been used for determination of effective factors on ranking hedging tools, and AHP questionnaire has been used for determination of weights and priorities of criteria and options.

4. FINDINGS

Finally, effective options and criteria on choosing hedging tools that are confirmed by managers of Tehran Security Exchanges are obtained in 5 option and 6 criteria due to method of current study and using from obtained information from questionnaires. After completing questionnaires different opinions of individuals were combined with each other, using Expert Choice software, and results are as follows. In this research incompatibility rate of all of matrices was less than 0.1 and hence there is no need for elimination of incompatibility. Incompatibility rate is a mechanism than indicate comparisons compatibility. Since incompatibility rate was less than 0.1 we can accept comparisons compatibility.

The following table shows final weight of criteria and option weights in relation to each of criteria that has been determined with help of using opinions of managers of Tehran Security Exchanges organization. Transaction capability in exchange with final weight 0/318 is the most important and respectively liquidity capability, transaction capability in OTC, need for payment of cash, having exact and known rules for doing transactions and having risk of not doing obligation are the least important factors influencing the decision.

As it can be seen in table, due to the criterion of transaction capability in OTC, forward contracts with weight 0/331 is most important and respectively swap contracts, option contracts, future contracts and mutual fund are the least important options. According to the criterion of transaction capability in exchange, option contracts with weight 0/363; according to the criterion of need for payment of cash, future contracts with weight 0/388; according to the criterion of liquidity capability, future contracts with weight 0/362; according to the criterion of having exact and known rules for doing transactions, option contracts with weight 0/320 and due to the criterion of having risk of not doing obligation, forward contracts with weight 0/417 are the most important options.

Table-1. Final weight of criteria and options

Criteria	Criteria weight	Options	Options weights in relation to criteria
Transaction capability in OTC	0.146	Forward contracts	0.331
		Swap contracts	0.313
		Option contracts	0.144
		Future contracts	0.120
		Mutual Funds	0.092
Transaction capability in exchange	0.318	Option contracts	0.363
		Future contracts	0.346
		Mutual Funds	0.153
		Swap contracts	0.082
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		Forward contracts	0.057
Need for payment of cash	0.124	Future contracts	0.388
		Option contracts	0.248
		Swap contracts	0.165
		Mutual Funds	0.110
		Forward contracts	0.089
Liquidity capability	0.226	Future contracts	0.362
		Option contracts	0.292
		Mutual Funds	0.222
		Swap contracts	0.068
		Forward contracts	0.056
Having exact and known rules for doing transactions	0.101	Option contracts	0.320
		Future contracts	0.306
		Mutual Funds	0.176
		Swap contracts	0.142
		Forward contracts	0.056
Having risk of not doing obligation	0.085	Forward contracts	0.417
		Mutual Funds	0.192
		Swap contracts	0.148
		Option contracts	0.127
		Future contracts	0.116

The below table shows final weight of options in relation to purpose. As it can be seen in table, future contracts with final weight 0/297 is in the first priority; second, option contracts with final weight 0/277; third, mutual funds with final weight 0/159; fourth, swap contracts with final weight 0/137 and Last Priority is forward contracts with final weight 0/130.

Table-2. Final weight of options in relation to purpose

Row	Options	Final weight of options
1	Future contracts	0.297
2	Option contracts	0.277
3	Mutual Funds	0.159
4	Swap contracts	0.137
5	Forward contracts	0.130

5. DISCUSSION

The discussion of hedging methods in markets through financial tools is serious and of great importance which is a matter of concern in financial management of world exchanges, and in our country it turned to be a serious subject matter after approval of comprehensive rule or law of capital market. Although, hedging tools has been defined and applied in the market to some extent, the defects and disadvantages can still be seen in this regard. Due to the dominant and common usury-less banking system in Iran, and ambiguity of religious jurisprudence viewpoint and lack of consensus among authorities on using derivative tools and also lack of efficiency of capital market, derivative tools have not been considered as an important factor in risk hedging and management. Financial tools play an important role in developing capital market, and Iran capital market needs

market-making tools and new financial tools to perform its main task for actual and potential investors so that Iran capital market is of enough efficiency in this regard.

The main reasons for the use of hedging instruments can be summarized as:

1. Resolve Concerns of parties in the transaction toward financial prices fluctuations in the future.
2. Variety in financial instruments of the capital market and therefore the possibility to attract new financial resources.
3. The speed in prices reform and adjustment in market.
4. Possible Optimal portfolio management and risk management
5. Prevention of severe market fluctuations
6. Optimize revenue due to people's tendency to take risks
7. Increase the efficiency of capital markets.

6. CONCLUSIONS

The question of the current study is presented as follows: which are the appropriate hedging tools for capitalists of security in priority order? For answering this question, hedging tools and appropriate criteria for prioritization of these tools were identified through studying research literature and surveying from experts. Hedging tools include Forward contracts, Future contracts, Option contracts, Swap contracts and Mutual Funds, and criteria of appropriateness of hedging tools include 6 criteria such as transaction capability in OTC (over-the-counter), transaction capability in exchange, liquidity capability, need for payment of cash, exact and known rules for doing transactions, having risk of not performing obligation that were considered as one of the multi-criteria decision making approaches using hierarchical analysis process method and were ranked in terms of importance. Results of this research are as follows: 1. Importance degree of each of criteria has been determined using opinions of exchange experts in couple comparison table that is related to 6 criteria such as transaction capability in OTC (over-the-counter), transaction capability in Exchange, liquidity capability, need for payment of cash, exact and known rules for doing transactions, having risk of not performing obligation. In other words, we determined weight and place of each criterion with hierarchical analysis process. After calculations, we observed that 6 criteria for ranking hedging tools in weight order are as follows that: transaction capability in Exchange is the most important criterion and having risk of not performing obligation the least important criterion among them. Further, compatibility coefficient rate of this model is 0.04 that it should be smaller than 0.1 or equal with 0.1 that is indication of acceptable compatibility of system.

2. Importance degree of each of options in relation to each of criteria has been determined using opinions of Exchange experts in couple comparison table related to options that were include of Forward contracts, Future contracts, Option contracts, Swap contracts and Mutual Funds. In other words, we determined weight and place of each option with method of hierarchical analysis process. After calculations, we observed that ranking of hedging tools in weight order is as follows that: Future contracts place in first priority and Option contracts, Mutual Funds, Swap contracts and

Forward contracts place in next priorities. Also, compatibility coefficient rate of this model is 0.02 that is indication of acceptable compatibility of system.

Based on performed researches and introduction of hedging tools, we can use a kind of these tools in transactions due to market conditions and available facilities. Because, we can reach to the reduction of fluctuation and risk and flexibility of prices in the future and become confident about prices in future and reduction of undesirable fluctuations by guarantee that exist in these kinds of contracts. Therefore, Authorities of Iran capital market should consider proposed new financial tools for use in Exchanges in religious jurisprudence viewpoint, with the formation of a set of economic and jurisprudence experts and with exact scientific consideration, and present proper solutions for existing jurisprudence doubts on (in) it, and evaluate financial tools for confidence from their best performance. Hence, they can provide conditions for employment of these hedging tools.

We're in a market that most people still do not know the nature of the stock and do not have sufficient familiarity with the capital market and corporate structures. We cannot expect that these individuals to easily understand future, option... and more complex tools. So, this is a necessity; culture and education concepts and principles of functioning of Iran capital market. Recommendations that can be given for reducing risk through changing the rules or creation of new transaction tools are as follows: First: economic atmosphere and related rules and instructions should have tendency toward the direction that risk and risk management is in the priority, in relation to obtaining the output. The first thing to do is that the risk of capital market should be explained and clarified for the public. That is, when the market was not good, or it was bad, this should be informed properly to the public. Likewise, the risk of investment companies and investment funds along with their output should be informed daily or weekly. Also, investment funds and managers of these funds should be directed toward these funds based on ranking risk, and similarly investors should be led toward these funds regarding the degree of their risk taking. It is also better to establish a set of limitations, and if possible the trade and transaction of natural persons should be lesson so that these persons attend at capital market through investment companies and investment funds. Financial markets should attempt to provide appropriate tools for each need and taste of market investors. In other words, they should provide financial support and hedging risk of economic atmosphere of the country through providing various financial tools. In this way, the public's tendency (people, families, firms and other organizations and state and private institutions) increases toward capital market.

Since the level of research and statistical units have been at the level of individual investors in the stock exchange and the current study subject is about application of appropriate hedging instruments for these people, therefore data must be collected from the same level and the research proposals are submitted at the same level. These tools are part of the investment instruments that can utmost be used in the area of corporate issues and not at the macroeconomic level which these tools can be used for all levels of the entire economy.

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