

# THE MULTIPLE POSSIBILITIES OF OPTIONS MARKET IN JORDAN

*Adnan Mohamad Issa Alwedyan*

Department of Financial & Administrative Sciences, Irbid University College, Al Balqa'a Applied University

---

## **Abstract:**

This study tried to answer of this question :Are there possibilities to apply the options market on Jordan market as hedging risk technique .The study used questionnaire method that targeted common and professional investors who deal in Amman stock market.

The results revealed that investors does not like the option market to apply in Jordan market, which refer to following reasons:

- 1- high risks resulting from using option market.
- 2- Lack of the necessary expertise to develop this market to match with \the possibilities of the Jordanian market.
- 3- the weakness of Jordanian financial market that prevent to applied option market. It requires from government authority to provide suitable invested environment to apply option market on Jordan.

---

**Keywords:** Options, risk, hedge, investment, Jordan

## **Introduction**

Over years, financial markets have acquired notable placement as a result of its association with the economic and financial developments whether on the individual and governmental levels. The transactions traded on the financial markets have greatly spawned, the number of institutional and individual investors trading on the financial markets increased, and the financial instruments whether real time or future have diversified. As a financial market, option markets that can be part of a real time or future markets are places where special kind of securities are traded on option whether put or call options, in which option

holder is given the right to buy or sell a security within specific period of time (American Option) or on certain maturity date (European option) at preset price. Since option holder has the right to whether exercise the option contract or not, then he has to pay for option writer nonrefundable reward known as call option (premium) ; which does not give to holder direct interest company's equity or profits so long as not exercised yet; i.e. as long as call option buyer has no ownership in the security on option.

The current study investigates the varied possibilities of an options market, options contracts and reality of such markets in Jordan where dealings on the options markets still too little and confined to securities such as stocks and bonds. This study further deals with problems hindering existence of such markets in Jordan.

### **Study Objectives**

This study intends to:

- 1- Identify the concept of options, types of options agreements, options markets and options strategies.
- 2- Identify the multiple possibilities of options markets in Jordan and hindering problems.

### **Significance of the Study**

Securities, including stocks and bonds are deemed the backbone of a financial market because they are solely traded in such markets. Generally, firms seek to trading with securities for reasons related to precaution and safeguarding against price fluctuations. The importance of the present study stems from its concern with options markets, and related problems that preclude development of such market in Jordan. In addition, because it casts light on bases of options markets and trading principles in the options markets this study contributes to further familiarization with such markets by various scholars.

### **Hypotheses**

The present study is based on the following hypotheses:

1. Unfamiliarity with the scientific concept of options markets by Jordanian investor affects their development in Jordan.
2. The government financial regulations and laws have no effect on the existence of options markets in Jordan.

3. The existence of options markets in Jordan is affected by the nature and behavior of Jordanian investor.

### **Methods**

(1) Population consists of financial brokerage firms at Amman Financial Market. A random sample of employees from brokerage firms and investors at Amman Financial Market was recruited to participate in the study.

(2) Targeted Population: Refers to the environment of monetary and capital markets in the Hashemite Kingdom of Jordan.

(3) Pilot Population: Refers to group on individuals operating or investing in the Hashemite Kingdom of Jordan.

#### **Sample Design**

Sample Type: Simple randomization

Sampling Method: Randomization

Sample Size: 50 individuals and investors at Amman Financial Market

Study Design: The current study investigates the correlations between variables of options markets development in Jordan

Nature of the Study: This study adopts the deductive approach considering the reliance on the literature reviewed and hypotheses tested (Zikmund, 2000).

### **Data Collection Methods:**

- a. Secondary Resources: The author collected data by reviewing related literature including books, articles, and via surfing the World Wide Web with view to unveil conceptual ambiguities.
- b. Primary Resources: To collect data from the primary resources, the author depended on to methods in order to clarify the phenomenon under study:

### **Questionnaire Instrument:**

A questionnaire was specifically developed to collect the primary data from respondents. The early vision of the questionnaire consisted of 24-items and was tested for validity (Appendix 1). Responses to the questionnaire items were measured on a four-point scale as follows: [1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree], the mean score (2.6) was accepted as the minimum degree of agreement. This was the second part of the instrument, while the first part measured demographics of the participants including gender, years of experience, academic qualification, job title and other data questioning about

dealings by respondents on options markets in terms of how long they have dealing on the options markets, type of options most frequently used, and the security most dealt with.

To ensure confidentiality of information provided and stress on their research purposes, respondents were asked never to disclose their names or the corporations they belong. So, the questionnaires were totally anonymous.

1- Unstructured Interview: Interviews were conducted with individual and institutional investors with view to survey their opinions regarding any obstacles preventing existence of options markets in Jordan.

2- Reliability

Chronbach Alpha coefficient of internal consistency was used to measure reliability coefficient for the questionnaire items in case administered again under similar conditions as before (Zikmund, 2000). Chronbach alpaha coefficient for the main variable in this study is shown by table (1)

**Table (1) Results (Chronbach alpha) of study variables (N=50)**

Major Variable	Item/s	$\alpha$
Familiarity with the scientific concept of options by Jordanian investors	6	0.735
Governmental Financial legislations	6	0.873
Nature and behavior of Jordanian investor	5	0.681

3- Procedures Following development of the questionnaire, the procedures were as follows:

1. Timetable was established for application of the study within two weeks at maximum for questionnaires administration and give back.
2. Questionnaires were administered to participants by hand, and returned back in the same way.
3. The number of questionnaires distributed to the financial brokerage firms and individuals was (50), and 100 per cent (40% institutional brokers, 60% individual brokers) of the questionnaires distributed were returned back, which is very a high proportion and viewed suitable for analysis purposes.

## **Statistical Analysis**

Descriptive statistics including frequencies, means, and standard deviations were used to summarize, describe and analyze data using the Statistical Package for Social Sciences (SPSS).

## **Theoretical Framework**

The purpose of the present chapter is to serve as introduction to put and call options and demonstrating technical terminology used with option dealings, sensitivity and risk measures related to option contracts and the use of option securities, types of option contracts with various securities, strategies and products of other put and call options.

## **Introduction**

Option markets (or bourse) is a sort of futures contract. The are in the United States six options markets, most prominent is Bourse of Chicago that solely deals with options. Since unregulated market of options was not acceptable the National Association of Security Dealers (NASD) that oversees the unregulated market of securities established to an independent bourse for options with the same designation (Gittman & Joehnk, 1999, P418). Options traded on such markets is a kind of instruments used by investors to shield against change of securities prices, and by speculators to gain profits (Hindi, 1997, P562).

In approaching options dealings, the major focus of this study, we will discuss the principles and general concepts of options dealings and strategies. The second part of the study will be dealing with organization and management of options market.

Essential principles and concepts of options dealings

## **Concept of Options Dealings**

Despite options contracts first emerged on London Stocks Bourse in the 19<sup>th</sup> century, the actual trading started only on Chicago Bourse, 1973.

For dealers, option contracts seem somewhat intricate at the first glance; however it is the case from some aspects, they can be dealt with so simply the same as in buy and sell contracts with real time price, where profit or loss is made based on the position taken and price direction (upward or downward) (Awad, 1988, P137).

The dealing with options depends on the golden rule of thumb that implies guessing and intuition due to availability of experience and information about the market.

## **First: Philosophy and definition of options:**

### **Philosophy of options**

Option contract implies benefiting by a dealer from correctness of his guesses that prices will go up or down. By buying option, the holder will have the right to put or call option based on his own predictions of price directions. Dealing with options presupposes many dealers with opposite expectations regarding prices in the market (Chance, 1992, P62).

### **Definition of Options Contract**

Right of option is a bilateral mutual agreement in which one party gives the other the right not the obligation to sell or buy an asset or certain financial instrument with specified price and within certain period of time. Possibly, the financial instrument be either stock, bond, interest rate, exchange rate, or even future contract. As a result options contract is bilateral contract in which both the options writer and options buyer have the discretion to practice or not to practice their respective right, in return they have to pay against the benefits they generate from practicing of such right. That price is designated as (premium) paid by option buyer to option seller for incurring peril of potential losses by option buyer in case that his predictions were accurate and the seller in such a case is obliged to exercise the contract (Al Tarad, 2000; Awad, 1988; Hindi, 1992).

As a term, options is known as a proper hedging instrument to limit losses as minimum as possible for dealers in securities and other, as call option, for example, gives hedging investors the opportunity to take advantage from increasing prices, while in the same time shield them from risks of price decline.

## **Second: Technical Terminology of Options:**

- **Call and Put Options**

1. *A Call Option:*

A call option is a contract identifies in which security the holder has the right to buy. This option includes two parties: the holder who has the right to buy a number of stocks, bonds or foreign currencies from counterparty during a period expires on specific date with certain price upon contracting. The counterparty is option writer who sells to the first party (buyer) that right. In effect, call option grants to holder any tangible right as long as not implemented, and the holder has no direct right in the corporate profits, and even has no association with the corporation. Call option is improbable unless expectations of both option

writer and holder regarding future price varied (Chance, 1992; Gitman et al, 1990; and Rose, 2000).

In short, an investor who predicts better stock price, for instance, would reap fruits from his prediction when realized, in return of paying tiny part of the stock value as a reward for the writer. However, if prediction failed, and the stock price remained or decreases, then the buyer will not implement the option, thereby losses will limit to the premium already paid to option writer no matter how low is becoming the market value of stock.

## 2. *A Put Option*

A put option is a contract identifies the security in which holder has the right to sell. Essentially, there are two parties in the put option contract: the first party is option holder who under the option has the right to sell the security to a third party within specific period of time on a mutually agreed upon price. The counterparty is option writer to is committed to implement the agreement, i.e. buying the security once making put option during the validity period of the option for the premium obtained (Hindi, 1995; Al Tarad, 2001, Alassar & Alsharif, 2000).

Noteworthy, the investor's predictions play a significant role in determining whether holder will implement option or not; as the implementation will be if there were gains, and if did not implement the investor will lose the premium.

### **Exercise the Contract:**

As previously discussed, the option holder has the discretion to decide whether to exercise the contract or not. If the option holder intended to exercise based on the contract, then the option holder shall communicate with the option seller predate of expiration notifying him with his intention to exercise the contract, who, in turn, shall be ready to respond to option holder.

### **Strike Price**

1. At the Money Price
2. In the Money Price
3. Out of the Money Price

**Expiry Date:** Options contracts have deadline expiry date on which option holder shall inform writer on the date or predate of expiration whether the contract will be eventually exercised or not.

### **Settlement Date:**

On the settlement date, security or product, as the subject of contract, is received or delivered, and this date is typically two working days later to contract maturity date.

### **Third: Options Styles:**

There are two styles of options dealings, namely the American and European styles.

#### **1. The European Approach:**

This style allows exercise of the contract on the maturity date only; whereas the contract is actually exercised two working days later.

#### **2. The American Approach**

This style allows exercise of contract on any reasonable day as specified in the contract within two working days latterly. This approach is the most widely used not only in the American market but also worldwide.

### **Fourth: Premium:**

Premium is the remuneration paid by option holder to contract writer. However, premium should be sufficient to justify the resulting risks; and from option holder's viewpoint, premium should be of value once fulfilled. Premium not refunded and normally paid out in advance and reflects the fact that peril has taken place and the payment against that peril is mature.

Payment can be on maturity date; and considered as a loan given by contract writer to contract holder. In return, contract writer would demand premium plus interest in premium from contracting date to maturity date which is known as Boston Style Option. The premium is quoted as proportion or points.

There are four factors influence premium rate including:

1. Maturity date
2. Exercise or strike price
3. Current/ spot price
4. Current Forward Price
5. Put and Call Options
6. European or American Approach
7. Price volatility ( Al Tarad, 2001; Hindi, 1997; Ficher & Jordan, 1987)



### **Fifth: Bid and Offer**

The trading mechanism at options markets is similar to that of other financial markets. When quotations bid is made to market makers, price bidder shall specify the following (Chance, 1992; Gitman & Joehnk, 1999):

1. Buying call option
2. Buying put option
3. Transaction value (amount)
4. Implementation Price
5. American or European approaches
6. Method by which premium is quoted.

### **Sixth: Sensitivity Measures and option Contract risks:**

There are many measures to track the changes in options prices and make necessary hedging from price ups and downs on the suitable time (Al Tarad, 2000, P330).

#### **First: Delta**

The term Delta symbolizes change in security or staple price as the matter of contract supposing other factors remain equal. Delta changes between 0-1 reflecting the possibility that option is expired. Delta measures probability of exercising option, so if the implementation price deviate from the market price, the probability of exercising the option becomes weak and possibly approaching zero when the price is very far. However, if the implementation price within market price, the probability if exercising option certain and delta equals (1). If the implementation price equals market price, then the probability of exercising option become (50%) and delta equals (0.5).

#### **Second: Gamma:**

This coefficient measures the change in delta for an option when the original price on which the option is based changes. When Gamma for an option equals 8 per cent, delta of that option changes 8%.

#### **Third: Theta**

This coefficient measures the decline of premium or option value over time or due to deterioration of time value that decline to zero with the expiration of the option. The coefficient measures daily decline of option value.

#### **Fourth: Vega**

This coefficient measures premium sensitivity of changes in the original price volatility at 1 per cent. This coefficient is essentially concerned with controlling volatility of original currency price and impact on the premium.

#### **Seventh: Types of Option Contracts**

##### **First: Buying Options:**

Option buyer has the right to buy from the counterparty certain security within specific period of time, and has the free will to exercise that right or not, without being obligation on implementation. Against buying, the option buyer pays premium that represents maximum loss likely incurred by option buyer. This type is divided into:

##### *1- Buying Call Option*

Buyer of call option always expect prices going upward, thereby being optimistic he buys options depending on conditions that accommodate his predictions and likeable to generate profits. Such option contracts are typically used for speculation and hedging.

##### *2- Buying Put Option:*

Put option holder contrary to call option holder is somewhat pessimistic in that prices are expected to go down. So that put option holder would sell the security or product owned at implementation price as agreed upon when prices go down below implementation price; and would also buy put option to make profit through speculation if prices decreased but still higher than the implementation price. In addition, he might buy put option for sake of hedging to ensure selling assets with specific price, i.e. implementation price if prices declined below that price.

##### **Second: Selling Options:**

Option writer grants option holder the right to exercise sell or buy rather than an obligation in return of paying premium. Option writer is committed to implement the right if the holder wished so. Option selling process is categorized into:

##### *1- Selling Call Option:*

Option writer is committed to sell certain security or product as specified in the contract at the agreed upon implementation price no matter what the price prevailing the market.

## 2- *Selling Put Option:*

When option writer predicts prices going up, the option will not exercised and the option writer will take advantage of the premium.

### **Eighth: Option Contract Strategies**

The increasing use of options produced strategies and other products of options more sophisticated known as complex options (AL Tarad, 2001; Al Massar & Al Sharif, 2000; Awad, 1988; Chance, 1992). Most important options strategies include:

#### **First: Straddle**, including:

##### 1. *Long Straddle*

The dealer would buy call option and put option at the same implementation price by the maturity date in the same time, when predicts prices to move briskly without being able to identify to what direction whether upward or downward. The dealer as a result takes precaution against simultaneous increase or decrease of prices. The highest loss incurred will be the premium paid, which normally high. The dealer will typically use either put or call option very quickly when price volatility is very high in which case profits will be gained; otherwise if prices were moving slow, the dealer would has no gain if not losing part of the premium already paid.

##### 2. *Short Straddle*

The dealer here would sell either the call option or put option at the same implementation price, if expected price to move slowly. This type of options is good for markets where prices are predicted to remain at the current levels. The use of such strategy achieves for dealer premium from selling put option and call option.

#### **Second: Strangle**, this strategy includes:

##### 1. *Long Strangle:*

This strategy is similar to Long Straddle with a difference that call option and put options are made at different implementation prices.

##### 2. *Short Strangle:*

This strategy is similar to Short Straddle with a difference that call option and put options are made at different implementation prices.

**Third: Speed**, this strategy includes:

1- *A Bull Speed:*

This strategy means buying call option at low implementation price or selling call option at higher implementation price. This strategy is used if prices on market was predicted to go up slowly.

3. *A Bear Speed:*

This strategy means buying put option at high implementation price or selling put option at a lower implementation price. This strategy is used when prices on market were predicted to go down slowly.

**Fourth: Long Strips:**

The dealer would use this strategy when the prediction is for prices to go down more than predicting to go high, so the dealer would make option contracts at the same implementation price and term, as follows:

Buying one call option contract

Buying two call option contracts

As a result, the dealer will pay premium for three option contracts, which necessitates sufficient conviction that prices will go down.

**Fifth: Long Strips:**

This is very similar to the previous strategy, but the difference is that the dealer here has greater conviction that prices will go up rather than down that he would make the following:

Buying one put option contract

Buying two call option contracts

**Sixth: Cylinder**

This strategy is also known as (Fence) and typically used buy a dealer who expects prices to go down while in the same time not prepared to pay higher premium rate. This strategy is as follows:

Buying put option at price close to market price rates

Buying call option at price very far from market price rates.

### **Seventh: Call Ratio Spread:**

This strategy implies buying call option contract at implementation price closely to the market price or selling multiple call option contracts at differing implementation price father than the first price. This strategy is used when there is a belief that prices will not increase where the dealer, as a result, would buy one and sell many option contract to make best use of premium rates. The profit, as a result, will typically fall within the limits of call option contract price and put option contract prices. However, losses will be very large if prices went up (increase) and many contracts were adversely exercised against the dealer by put option buyer.

### **Eighth: Put Ratio Spread**

Contrary to the earlier strategy, this one implies buying put option contract and selling multiple put option contracts at differing implementation price believing that prices will get high. However, if the contrary happened and put option holders, because prices decreased, sold their put option contract, then dealer will be at risk of great loss.

### **Ninth: Butterfly Strategy**

The strategy consists of four types of option contracts:

Two call option contracts

Two put option contracts

At differing implementation prices, so that the implementation price of call option contracts is lesser or higher than the call option selling contracts, which consists of one implementation price.

### **Tenth: CONDOR Strategy:**

This strategy consists of four option contracts, as follows:

Buying call option contract at price close to market quotation

Buying call option contract at price far from market quotation

Selling two call option contracts with differing prices.

It is worth to note, that option dealings in stocks do not differ from that in bonds and currencies. Similar to stock option market, there are implementation date and premium; and upon implementation, the assignment of currency on option becomes demanded; and so long as the contract is about foreign currency, the assignment typically is done through a deposit to a bank current account (Sharpe & Alexander, 1990, P580).

A final note is that under the option contract there is no need for buyer to deliver stocks the subject of contract to the writer no matter whether stock prices went up or down on the contract implementation date or deviated from the price already agreed upon (Hindi, 1993, P740).

### **Ninth: Types of Option Markets**

Similar to real time market, there are two types of option markets: regulated and unregulated market. The regulated markets is a central place where dealings are traded. Differently, the unregulated market is the place where transactions are traded through brokers. Before markets are regulated, there was a small number of dealers and brokers who are members of the Put & Call Dealers Association, and dealers and brokers were playing the role of meddler between an option writer and option holder (Hung & Randall, 1987, P346; Hindi, 1997, P591).

### **Tenth: Influence of Option Markets on the Present (Real Time) Market:**

As a security, options have no economic value because they grant holder the title to no economic assets; and on the other hand they don not attract any deposits on which depend the enterprises to fund their investment proposals (Hindi, 1997, P623). So, the question is: what the influence options market has on the financial resources available to the real time market? To this question, Geisst (1989) suggested that option market essentially is a speculative market, it is unperceivable for options market to attract resources for major investors who invest their funds for increase their wealth through the steady growth of the market value of securities they hold. Despite the success reached by the options markets, especially in the United States, the still criticized due to high leverage ratio that limited advantages to speculators by covering their investment positions (Chance, 1992, P675).

In addition, the options have no identifiable economic value, as it is neither a funding instrument for enterprise such as stocks and bonds, nor an instrument used by an investor to actually take into possession a tangible asset (Hindi, 1997, P625).

In short, options serve in safeguarding an investor from being exposed to risky volatility in securities prices the subject of the contract.

## Results Analysis

This chapter discusses results from the empirical part of the study as revealed by the analysis of data collected from respondent opinions surveyed regarding obstacles precluding existence of options markets in Jordan. Obstacles were assigned to three major variables measured by a set of sub-variables.

### First: Demographic Characteristics

Table (2) shows demographic characteristics of participants by gender, age, educational level, job title, and years of experience.

**Table (2) Demographics of Participants (N=50)**

Percentage%	Frequency	Demographic Characteristics	
92	46	M	Sex
8	4	F	
***	***	Secondary or less	Academic Qualification
4	2	Intermediate Diploma	
66	33	BA	
30	15	Graduate Studies	Year of Experience
46	23	1- Less than	
36	18	5-less than 10	
18	9	10 and more	
10	5	Director	Job Title
48	24	Chair	
16	8	Head of Unit	
26	13	Corporate Representative	

### Second: Dealings by participant companies with foreign financial markets, in general and with the option markets, in particular:

Respondents were asked by the questionnaire items whether their companies are dealing with foreign financial markets; whether have dealings on the international and domestic options markets and/or not at all. In they have dealing with options markets, how long, and what option right most traded by the companies dealing with options, and what is

the security most replaces option. Table (3) summarizes results reached from responses to such questions.

Table (3) shows that 96% of the respondents have regular dealings on the foreign financial markets, whereas only 4% traded on Amman Bourse. When foreign financial market non-dealers asked directly why they don't deal with foreign financial markets, results revealed that the major reason was financial incapability and fear to take risk. In addition, results also showed that 90 per cent of option market dealers are as follows: 8% domestic dealers only, 72% international dealers only, and 10 percent are both domestic and international dealers. However, only 10 per cent of participants companies were non-deals at all. They attributed the reason to their little background about how to initiate such dealings; while others responded they were not conscious to such markets before the Securities Corporation constitution that permitted option market dealings. As for period of dealing, results revealed that 58 per cent of respondents have been dealers from two to less than five years, followed by those for one year or less. Regarding options type, 54 per cent of respondents indicated that they have call options whether buy or sell; and 49 per cent of respondents deal with stocks, followed by foreign currencies, and bonds, and never deal with financial indices. However, 24 per cent of respondents indicated they deal with put options, and 22 per cent of respondents were dealing both with call and put options.

**Table (3) Dealing of Jordanian companies with international financial markets, in general and with options market in specific (N=50)**

Percentage%	Frequency	Question	
96	48	Yes	Your company have dealings on the foreign financial markets
4	2	No	
8	4	Domestically only	Your company have dealing on option markets
72	36	Internationally only	
10	5	Both domestic and international	
10	5	Never at all	
90	45	Total number of respondents dealing in options	
40	18	One year or less	Time length of dealing in options



58	26	2 to less than five years	
2	1	Five years or more	
100	45	Total	
54	23	Call option	Type of option
24	11	Put option	
22	10	Call & Put Option	
100	45		Total
49	22		Stocks
18	8		Bonds
33	15		Foreign Currency
***	***		Financial Indices
100	45		Total

**Third: Obstacles hindering existence or/and dealing with option markets in Jordan**

Through a set of major variables, and sub-variables as implied by study hypotheses, the related obstacles were identified as follows:

First Hypothesis: *"Unfamiliarity with the scientific concept of options markets by Jordanian investor affects their development in Jordan"*.

This hypothesis was measured through a number of sub-indices as shown by table (4) of the variables implied by this hypothesis.

**Table (4) Obstacles related to unfamiliarity with option markets by Jordanian investors (N=50)**

SD	M	Agree		Disagree		Variable	
		%	T	%	T		
0.65	2.26	36	18	64	32	Option market dealings is a sort of speculation	1
0.49	2.61	58	29	42	21	Options make to investor revenue per annual	2

0.33	2.95	68	34	32	16	Options are used for hedging and safeguarding against price fluctuations	3
0.66	2.64	58	29	42	21	Options provide reasonable safeguard against interest rate volatility	4
0.51	2.77	70	35	30	15	Writer needs security from option buyer	5
0.65	2.35	54	23	54	27	Options is Derivative Security with no value in itself	6

The analysis of the previous table to identify how knowledgeable are Jordanian investors to the scientific concept of options market, results demonstrated that 64 per cent of respondents ( $M=2.26$ ) view that the options markets as not a sort of speculation, compared with 36 per cent viewing it as a sort of speculation. The later view is consistent with the current status of options markets as being speculative as argued by Geisst (1989) who demonstrated that options markets are essentially a speculative market.

Results indicated that 58 per cent of respondents agreed that options markets generate annual revenue for an investor. This result is inconsistent with the mechanism by options dealings operate that depends on investor predictions that as a result would not necessarily comply with market situation thus loss rather than profit would generate. In all cases options contracts imply no annual revenue. Results further showed that 68 per cent of respondents view that options are used for hedging and safeguarding against price volatility, and that 58 per cent of respondents consider that options provide reasonable shield against interest rate fluctuations. Naturally, options serve as instrument shielding and safeguarding against price volatility in general and interest rates, in particular. As indicated earlier stocks and foreign currencies are the securities most traded by dealers and they are greatly sensitive to price, primarily interest rate prices. Results showed that 70 per cent of respondents ( $M=2.77$ ) agreed that option writer need a guaranty by option buyer. This result is inconsistent with option market rules where option writer demands no guaranty from options buyer whether put or call option, since the buyer will fulfill his obligations under contract by the premium (option cost) fulfilled to option writer (Hindi, 1997, P610). As for the allegation that options is a derivative

security that has no value in itself, 54 per cent of respondents disagreed with it compared with 46 per cent agreed, indicating that good proportion of respondents are not sufficiently knowledgeable about what is options in fact, which is a derivative security with no value per se, but takes value from the security on option (Hindi, 1997, P553).

Based on the earlier results the first hypothesis is accepted implying that Jordanian investor is insufficiently knowledgeable about the scientific concept of options markets, which forms a real hindrance impeding existence of options markets in Jordan. Results clearly showed that good proportion of respondents agreed that options are not speculative; they generate annual revenue; and that options writer need a guaranty from options buyer. Further, there is a good proportion of respondents did not recognize the concept of options by indicating that options is not a derivative security that has no value in itself. All such evidence contradict with the scientific perception of options markets that confirm options markets as being a sort of speculation; generate no specific annual revenue for an investor; options writer requires no guaranty from the options buyer; and that options is a derivative security with no value in itself, but rather takes value from the security on option.

Second Hypothesis: *"The government financial regulations and laws have no effect on the existence of options markets in Jordan"*

This hypothesis was measured through a number of sub-indications as shown of table (5) of variables implied by this hypothesis.

**Table (5) Legislation-related Obstacles hindering existence of options market in Jordan (N=50)**

SD	M	Agree		Disagree		Variable	
		%	T	%	T		
0.35	3.25	84	42	16	8	Financial legislations in Jordan allow for options dealings in Jordan	7
0.47	2.98	72	36	28	14	Lack of credit ranking of Jordanian companies preclude development of options in Jordan	8
0.29	3.62	88	44	12	6	Availability of tax exemptions on earnings fosters options dealings	9
0.59	2.77	78	39	22	11	Incomplete disclosure by Jordanian companies about their financial report on time hinders existence of options market in Jordan	10
0.33	3.61	12	6	88	44	Governmental laws stand against dealing with options in Jordan	11

0.21		47	6	3	Jordan financial market is developed to the degree at which option markets can be dealt with	12
------	--	----	---	---	--	----

The previous table (5) shows that 84 per cent of respondents ( $M=3.25$ ) agree that government financial regulations allow for practicing option dealings in Jordan, since the newly enacted Securities Corporation constitution mandated regulations that allow for options market practices. However, 72 per cent of respondents ( $M=2.98$ ) considered that lacking a credit ranking of Jordanian companies prevent practicing option in Jordan; which put a demand on government to provide for legislations ensuring credit ranking of Jordanian companies. Major part of respondents (88%) view that the tax exemptions on option revenues activate existence of option market in Jordan, since from tax perspectives, options are dealt with as capital asset for holder (buyer), that the buying cost (premium) is not reckoned as expenses that to be discounted from pre-tax income (Francis, 1989, P621). However, profits from options are considered as taxable income, and losses are to be deducted from the investor's pretax income. On this basis, tax exemptions are dealt with as encouraging practicing options in Jordan.

Results showed that 78 per cent of respondents ( $M=2.77$ ) consider that incomplete disclosure by Jordanian companies about their financial reports timely would hinder existence of options market in Jordan, which prevent investors from recognizing the financial position of companies at different and most suitable times, which finally impedes making options contracts with such companies, particularly if known that option contracts are based on guessing and require sufficient and timely information.

Results showed that 88 per cent of respondents disagree about the allegation that government laws hinder option practices in Jordan. Comparatively, 94 per cent of respondents viewed that Jordanian financial market is well-feathered to the degree that options markets can be dealt with, indicating the availability of financial infrastructure facilitating option dealings in Jordan.

In light of the earlier results, the second hypothesis "*The government financial regulations and laws have no effect on the existence of options markets in Jordan*" is thus accepted with the effect that the current legislations permitted options dealings, with some other legislations still needed, specifically those related to tax exemptions and credit ranking of Jordanian companies.

Hypothesis Three: *"The existence of options markets in Jordan is affected by the nature and behavior of Jordanian investor"*.

This hypothesis was measured through a number of sub-indications as shown of table (6) of variables implied by this hypothesis.

**Table (6) obstacles related to nature and behavior of Jordanian investor (N=50)**

SD	M	Agree		Disagree		Item	
		%	T	%	T		
0.41	2.32	18	9	82	41	Jordan investor enjoys sufficient risk-taking to be able to deal with options market	13
0.49	3.66	86	43	14	7	Option market is highly risky that hampers existence of such market in Jordan	14
0.35	2.71	62	31	38	19	Leanness of capital of Jordanian companies lessens potential availability of options markets in Jordan	15
0.57	2.64	60	30	40	20	Jordanian investors view options premium as a sort of gambling which precludes options market dealings	16
0.68	3.72	70	35	30	15	Deficient capital accumulation for Jordanian investor limits availability of such markets.	17

The previous table shows that 82 per cent of respondents disagreed that Jordanian investors sufficiently ( $M=2.32$ ) take risk so that they are able to deal with the options market; whereas 86 per cent of respondents ( $M=3.66$ ) indicated that the options markets is highly risky, which hinders existence of such markets in Jordan. This result is consistent with the observation that options markets are characterized with high risks and hazardous, basically because it is governed with factors associated with experience and estimates of those

involved. In addition, results demonstrated that 62 per cent of respondents ( $M=2.71$ ) consider that leanness of capital held by Jordanian companies limits the possibility for existence of options markets in Jordan; noting that strength of capital motivate dealing with options markets that are relatively highly expensive. On the other hand, 60 per cent of respondents ( $M=2.64$ ) indicated that Jordanian investor sees options premium as a sort of gambling, which hinders existence of options markets. As for capital accumulation, results showed that 70 per cent of respondents ( $M=3.72$ ) view that weak capital accumulation for Jordanian investors limit the opportunity for existence option markets in Jordan.

In conclusion, results indicate that Jordanian investor does not risk adventuring on a market that is highly risky such as option market. In addition, Jordanian investor views option premium as a sort of gambling, besides weak accumulation of capital are all form hindrances impeding existence of option market in Jordan.

Based on earlier results the third hypothesis stating "*The existence of options markets in Jordan is affected by the nature and behavior of Jordanian investor*" is thus accepted.

#### **Fourth: Implications and Recommendations**

This part of the study intends to demonstrate major results reached by the present study as revealed by the data collected from sample characteristics, and hypotheses tested, and also attempts to suggest recommendations in light of the revealed results.

a. Implications:

- 1- Results showed that Jordanian investors lack sound background knowledge about the scientific concept of options in terms of dealing with options markets and the option per se and that options writer does not demand guaranty from options buyer whether in case of put or call options.
- 2- Results indicated that financial legislatures and government regulations do not impede development of the options market in Jordan, particularly knowing that Jordanian Securities Corporation Act permitted option market dealings.
- 3- Results further demonstrated that Jordanian investors lack sufficient risk-taking spirit that they refrain from entering markets that are highly risky such as options markets. Jordanian investors also consider options premium as a sort of gambling, implying nature, behavior and capacity of a Jordanian investor preclude existence of options market in Jordan.

b. Recommendations:

- a. The researcher advises holding specialized training courses by either Investment Fostering Corporation or Amman Bourse for Jordanian investors to acquire knowledge about basics of dealing with financial markets in general and options markets in specific.
- b. The researcher recommends activate of the current governmental financial, and encourage enact other legislations allowing special tax exemptions on options revenues for a certain period of time; and also enactment of financial legislations ranking credit of Jordanian companies.

## **References & Resources:**

### **Arabic References**

- Al Tarad, Ismail. (2001). Management of Foreign Exchange. 1<sup>st</sup> Ed., Irbid, Jordan
- Alassar, Rashad; Al Sharif, Elian. (2000). International Finance. 1<sup>st</sup> Edition. Dar kAl Maseera, Amman.
- Awad, Marwan. (1988). Foreign Exchange, Investment & Financing: Theory & Practice. Institute of Banking Studies, Amman.
- Hindi, Muneer. (1997). Management of Financial Markets and Institutions. Knowledge Enterprise. Alexandria.
- Hindi, Muneer. (1993). Investment Instruments at Capital Markets: Securities and Mutual Funds. Financial Markets Series (1). Arabic Institute for Banking & Financial Studies.

### **International References**

- Chance, Don M. (1992). An Introduction to Options and Futures. 2<sup>nd</sup> Ed. The Dryden Press.
- Ficher, D. (1989) & Jordan, R. (1987). Security & Portfolio Analysis: Concepts & Management. OH: Merrill Pub
- Geisst, C. (1989). A Guide to Financial Markets. 2<sup>nd</sup> Ed. London. The McMillan Press
- Gitman, Lawrence, J. & Joehnk, Michael, D. (1999) Fundamentals of Investing. 7<sup>th</sup> Ed. Addison-Wesley.
- Huang, S. and Randall, M. (1987). Investment Analysis and Management. 2<sup>nd</sup> Ed. Boston: Allyn & Bacon
- Rose, Peter, S. (2000). Money & Capital Markets, 7<sup>th</sup> Ed., Irwisn. McGraw-Hill

- Sharpe, W. & Alexander, G. (1990). Investments, 4<sup>th</sup> Ed., N.J. Prentice-Hall
- Zikmund, W. & Alexander, G. (1994). Business Research Methods, International Ed. The Dryden Press, Harcourt College Publishers, N.Y.

**Appendix (1)**

Amman Arab University for Graduate Studies		
Faculty of Administrative Sciences & Finance		
Doctor of Management Program		
Obstacles Precluding Existence of Options Market in Jordan		
Empirical Study		
Mr./Miss Director,,,,		
Compliments,,,,		
This study intends to identify problems precluding existence of options market in Jordan.		
Your are kindly requested to respond to this questionnaire items in light of your company reality. Your accurate responses to this questionnaire will be valuable to the validity of the results reached by this study. Your cooperation is gratefully appreciated, and we ensure secrecy of the information provided and confirm it will not be used for other than academic research purposes.		
Kindly accept higher regards,,,		
Researcher		
<b>Demographics:</b>		
F	M	1. Gender
2. Age		
20-less than 40 yrs	Less than 30 yrs	
50 yrs or above	40-less than 50 yrs	
3. Academic Qualification		
Intermediate Diploma	General Secondary or below	
Graduate Studies	BA	
4. Years of Experience		
5-less than 10 yrs	Less than 5 yrs	



15 or more	10-15 yrs	
5. Job Title		
Head of Unit	Director	
Other	Division Head	
6. Does your company have dealings with foreign options markets		
No		Yes
<ul style="list-style-type: none"> <li>• If so, please answer questions 7 through 9</li> </ul>		
7. Period of Dealing		
5 years or more	2 years to less than 5 years	One year or less
8. Type of Option most frequently used (you may choose more than one)		
<ul style="list-style-type: none"> <li>• Put Option</li> </ul>		
<ul style="list-style-type: none"> <li>• Call Option</li> </ul>		
9. Instruments used by your company in their dealings on the options markets:		
Foreign Currencies	Stocks	
Financial Indices	Bonds	
Other (Specify) .....		

• Please put (X) against the response most suitable in your view

Strongly Agree	Agree	Disagree	Strongly Disagree	Item	
				Option market dealings is a sort of speculation	1
				Options make to investor revenue per annual	2
				Options are used for hedging and safeguarding against price fluctuations	3
				Options provide reasonable safeguard against interest rate volatility	4
				Writer needs security from option buyer	5
				Options is Derivative Security with no value in itself	6
				Financial legislations in Jordan allow for options dealings in Jordan	7
				Lack of credit ranking of Jordanian companies preclude development of options in Jordan	8
				Availability of tax exemptions on earnings fosters options dealings	9
				Incomplete disclosure by Jordanian companies about their financial report on time hinders existence of options market in Jordan	10
				Governmental laws stand against dealing with options	11

				in Jordan	
				Jordan financial market is developed to the degree at which option markets can be dealt with	12
				Jordan investor enjoys sufficient risk-taking to be able to deal with options market	13
				Option market is highly risky that hampers existence of such market in Jordan	14
				Leanness of capital of Jordanian companies lessens potential availability of options markets in Jordan	15
				Jordanian investors view options premium as a sort of gambling which precludes options market dealings	16
				Deficient capital accumulation for Jordanian investor limits availability of such markets.	17