Business Excellence and Management
Volume 2 Issue 3 / September 2012

THE IMPACT OF STOCK OPTIONS TRADING ON THE MARKET VALUE OF COMPANIES LISTED IN KUWAIT STOCK EXCHANGE

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Abstract
This study aims to examine the impact of stock options trading on the market value of companies listed in Kuwait Stock Exchange. The phenomenon of volatility in securities prices concerned as a threat to the companies listed on Kuwait Stock Exchange, which forced companies' managers to deal with new financial instruments particularly financial options to hedge from those risks .we will take a sample of (30) companies that deal with stock options, these companies are listed in the appendices, we have chosen these companies because of the availability of adequate information about trading on stock options from 2006 to 2011. All companies must adopt options contracts because of its significant impact on the market value of those companies through the impact on the trading volume of companies' stocks and thus changes in the demand and supply of such shares which leads ultimately to changes in the value of shares of these companies in the market. The researcher recommends using options contracts from the perspective of the investor because of its role in achieving high and guaranteed profits, when exercising the option contract whether is call or put option at a pre-determined price and thereby yielding a capital gains resulting from the difference between buying and the selling price.
Keywords: Kuwait Stock Exchange, Investment decisions, International financial markets.

1. INTRODUCTION

Risk is a special feature of financial markets; variations in the prices of securities are induced over time by demand-supply dynamics, Companies and Investors are now exposed to risks caused by unexpected movements in prices of securities, causing the uncertainty of expected future profits from investing in securities. Because of exposure to such risks, scientists went to determine new financial methods that help on hedging from fluctuations in securities prices, the science of financial engineering is the latest science that is used for hedging from such risks, which include derivatives contracts that derive their value from the value of

underlying assets such as stocks, bonds, and currencies, etc. (Zivot, Parks and Davis, 2010; Yudaken, 2010; McDonald, 2009).

This study aims to highlight on stock options traded on Kuwait Stock Exchange, which is one of the most important instrument of derivatives contracts, that gives the investor great opportunity to hedge from risks, as it participates in trading in diversified securities (shares, bonds, exchange rates, etc.) for the purpose of investing, speculating and hedging from market volatility.

The importance is to identify options market and the benefits it provides to market dealers, also shows the impact of this market on corporate market value, which helps corporate managers to make sound decisions about adopting this type of financial instruments or not. Through this study we will see if there is impact of stock options traded by companies listed on Kuwait Stock Exchange and belong to different sectors, on trading volume of companies' stocks, companies' market value and the volatility of that value.

2. LITERATURE REVIEW

Vasquez, (2010) – this thesis consists of three essays that study the pricing of two types of securities: stocks and stock options. In particular, the researcher explores the pricing of US stocks and options on stocks. The binding idea in this thesis is to find individual factors that are priced and, consequently, predict subsequent returns in the stock or in the options markets. He discovers that this measure has a positive relation with future option returns.

Kumar & Vashishtha, (2010) – this study attempts to discuss the genesis of derivatives trading by tracing its historical development, types of traded derivatives products, regulation and policy developments, trend and growth, future prospects and challenges of derivative market in India. And the results of the study are that Derivatives are risk management tool that help in effective management of risk by various stakeholders. The derivatives turnover on the NSE has surpassed the equity market turnover. Significantly, its growth in the recent years has surpassed the growth of its counterpart globally. Espinosa, (2008) – this study presents a framework for intelligent software agents to manage risk in electronic marketplaces using Option Derivatives. This research shows that agents which traded Options by choosing actions aiming to minimize their risk performed significantly better than agents using other trading strategies, in the majority of the experiments. Agents using this risk–minimizing strategy also observed a lower correlation between the asset price and their

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returns, for the majority of the experimented scenarios. Agents which traded Options aiming to maximize their returns performed better than their peers in the scenarios where the asset price volatility was high. Kluge, (2006) – this thesis examines a simple spot price model. It derives the moment generating function as well as various approximations to the probability density function of the logarithm of this spot price process at maturity T. The study shows that the risk neutral dynamics remains within the class of considered models and hence it is able to calibrate the model to the observed forward curve and present semi-analytic formulas for premium of both call and put options on forward contracts with and without a delivery period.

Ntwiga, (2005) – this study aim to explain how Numerical methods are an important part of the pricing of financial derivatives and especially in cases where there is no closed form analytical formula. As a result of that the researcher concluded with the pricing of exotic options with special emphasis on path dependent options. Monte Carlo simulation technique is applied as this method is very versatile in cases where there is no closed form analytical formula. The method is slow and time consuming but very flexible even for multi-dimensional problems. Rehman, (2004) – in this thesis the researcher considers the general case, when exchange rate evolves according to arbitrary one-dimensional diffusion process with local volatility that is the function of time and the current exchange rate and where the domestic and foreign currency risk-free interest rates may be arbitrary continuous functions of time. The researcher established these properties based on systematic use of the monotonicity in volatility for the value functions of the American as well as European options with convex payoffs together with the Dynamic Programming Principle and he obtained certain type of comparison result for the value functions and corresponding exercise boundaries for the American puts with different strikes, maturities and volatilities.

Fofana, (2003) – this study addresses the issue of financial derivatives markets in developing countries. It successively sketches the main features of financial derivatives and the related regulatory issues. The study finds that development of financial derivatives is justified in developing countries by volatility in output, prices, currency, exchange rates, and interest rates. Chen, (2003) – this thesis deals with European and American options with tree methods via extrapolation and provides an efficient methodology. Binomial and trinomial trees are widely used in numerical methods for derivatives pricing and applicable across a wide range of option types. However, convergence to the correct option price is oscillatory and non-monotonic. This situation makes the tree method inaccurate and unsuitable for

extrapolation. The researcher fixes the problem by pegging the strike price in the CRR method and makes it applicable for extrapolation.

Widdicks, (2002) – this thesis formulates the pricing problem and examines the existing techniques for valuing such options. It proposes extensions to lattice, finite difference and quadrature methods which show an improvement in accuracy on the conventional methods. Singular perturbation techniques are also applied to option pricing problems; one outcome being the creation of universal tables for single asset American put options which enable valuation using a simple interpolator scheme. Finally, these singular perturbation techniques are extended to options on multiple underlying's', providing new insights into the valuation problems.

3. RESEARCH HYPOTHESES

- H_{01}: There is no statistical significant impact (a=0.05) of trading volume of stock options on companies' market value.
- H_{02}: There is no statistical significant impact (a=0.05) of trading volume of stock options on volatility of stock price.
- H_{03}: There is no statistical significant impact (a=0.05) of trading volume of stock options on trading volume of companies' stocks.

4. METHODOLOGY

4.1. Research population and sample

The study population consisted of all companies listed on Kuwait Stock Exchange that trade on options which represent (58) companies from all sectors, we will take a sample of (30) companies that deal with stock options, these companies are listed in the appendices, we have chosen these companies because of the availability of adequate information about trading on stock options from 2006 to 2011. Data will be collected from the financial and statistical reports issued by these companies, on an annual basis, also from publications of Kuwait Stock Exchange (Kuwait Financial Centre (MARKAZ) annual report, 2011).

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4.2. Model and variables

Independent variables: Santa-Clara, Pedro, & Saretto, Alessio (2009), Jha, Siddhartha, (2011), Kadan, Ohad & Swinkels, Jeroen, (2008), Chance, Don, & Books, Robert, (2008), Gkamas, Dimitrios, (2001), Harish, A. S, (2001).

The type of underlying stock:

1. Trading volume of industrial companies' stock options.
2. Trading volume of financial companies' stock options.
3. Trading volume of services companies' stock options.
4. Trading volume of real state companies' stock options.

Trading volume on stock options = quantity of stock options contracts* stock option unit price

Dependent variables:

1. Companies' Market value.

Market value = number of outstanding shares * closing price per month

2. Volatility of stock price. And it is calculated by the following steps:
   - $\bar{S}$: The mean value of the daily stock price.
   - S_{days} : The daily market value of stock.
   - 262: the number of trading days in a year.

$$\bar{S} = \frac{\Sigma S_{days}}{Number\ of\ Trading\ Days}$$

   - σ^2 : The variance of daily market value of stock.

$$\sigma^2 = \frac{\Sigma\left(\bar{S} - S_{days}\right)^2}{262}$$

   - σ = the standard deviation of daily market value of stock (volatility of stock price).

$$\sigma = \sqrt[2]{\sigma^2}$$

3. Trading volume of companies' stocks:

Trading volume on stocks = Number of shares demanded and supplied represented by the quantity of stocks.

5. RESEARCH HYPOTHESES TESTS

In this study we will use the simple linear regression analysis to determine the impact of the trading volume of companies' stock options that belong to several sectors, on their market value, the volatility of stock price of each company, and the trading volume of companies' stocks. This analysis will show the value of (R^2) which indicates to the Coefficient interpretation to explain the degree of influence generated by the trading volume of options on the dependent variables, also it will show the value of (sig) which refers to the significance level, by which the hypothesis is rejected or accepted. Also we will compare between the value of T- test, also the value of (β) which refers to degree and direction of the relationship between the independent variable and all dependents variables, and the analysis of the various sectors in general, according to each dependent variable. Analysis of the various sectors in general, according to each dependent variable.

- **Market value**

First Hypothesis: (H_0) There is no impact of trading volume of financial companies' stock options on companies' market value.

TABLE 1 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON THE MARKET VALUE OF FINANCIAL SECTOR COMPANIES

Company	R^2	Sig	β	T-calculated
1. National Bank	0.002	0.699	0.049	0.389
2. Kuwait International Bank	0.049	0.069	0.222	1.850
3. Burgan Bank	0.007	0.489	0.084	0.696
4. Kuwait Finance House	0.004	0.613	0.062	0.508
5. National Investments Company	0.07	0.028	0.264	2.239
6. Kuwait Projects Company	0.116	0.005	0.341	2.920
7. Al-Mal Investment Company	0.001	0.777	0.035	0.285
8. Gulf Insurance Company	0.018	0.360	0.132	0.925

Table 1 refers to the linear regression test of financial companies listed on Kuwait Stock Exchange, as we see all of these companies there is no impact of trading volume of financial companies' stock options on companies' market value. Also the value of (sig) confirm this conclusion, which is more than 5% for most of these companies except two investment companies, and the value of Coefficient interpretation (R^2) shows the low degrees of this impact, also the value of (β) which indicates to weak positive relationship between the two variables.

Second Hypothesis: (H_0) There is no impact of trading volume of industrial companies' stock options on companies' market value.

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TABLE 2 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON THE MARKET VALUE OF INDUSTRIAL SECTOR COMPANIES

Company		R^2	Sig	β	T- calculated
1.	National Industries Group	0.156	0.001	0.395	3.598
2.	Kuwait Pipes Industries & Oil Services	0.077	0.018	0.278	2.424
3.	Heavy Engineering And Ship Building	0.065	0.034	0.256	2.166
4.	United Industries Company	0.161	0.001	0.402	3.591
5.	BOUBYAN Petrochemicals	0.018	0.262	0.138	1.132
6.	Equipment Holding Company	0.270	0.000	0.520	4.551

This table shows there is an impact of trading volume of industrial companies' stock options on companies' market value. The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on those companies' market value, and the value of (β) which refers to the medium positive relationships between the two variables.

Third Hypothesis: (H_0) There is no impact of trading volume of services companies' stock options on companies' market value.

TABLE 3 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON THE MARKET VALUE OF SERVICES SECTOR COMPANIES

Company		R^2	Sig	β	T-calculated
1.	Agility Public Warehousing	0.174	0.000	0.417	3.789
2.	Mobile Telecommunications	0.024	0.200	0.154	1.293
3.	Independent Petroleum Group	0.033	0.139	0.182	1.496
4.	Sultan Center Food Company	0.403	0.000	0.635	6.573
5.	National Mobile Telecommunications	0.072	0.038	0.268	2.118
6.	Kuwait & Gulf Link Transport	0.237	0.000	0.487	4.626
7.	Al-SAFWA Group Company	0.247	0.000	0.497	4.091
8.	Livestock Transport & Trading	0.127	0.003	0.356	3.045
9.	DANAH ALSAFAT Foodstuff	0.352	0.000	0.593	5.984

As we see from Table 3 that there are nine services companies, most of them have an impact of trading volume of services companies' stock options on companies' market value. The Coefficient interpretation (R^2) indicates to the positive impact for companies' options trading volume on those companies' market value, and the value of (β) which refers to the medium positive relationships between the two variables.

Fourth Hypothesis: (H_0) There is no impact of trading volume of real estate companies' stock options on companies' market value.

TABLE 4 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON THE MARKET VALUE OF REAL ESTATE SECTOR COMPANIES

Company	R^2	Sig	β	T-calculated
1. Kuwait Real Estate Company	0.294	0.000	0.542	4.957
2. United Real Estate Company	0.219	0.000	0.468	4.235
3. National Company	0.355	0.000	0.596	5.887
4. Arab Real Estate Company	0.156	0.001	0.395	3.436
5. Al-ENMA'A Company	0.053	0.064	0.231	1.884
6. INJAZZAT Dev. Company	0.297	0.000	0.545	5.154
7. The Commercial Company	0.204	0.001	0.451	3.646

Table 4 refers to the statistical analysis of real state sector companies, which consists of seven companies, from the table there is an impact of trading volume of real estate companies' stock options on companies' market value. The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on those companies' market value, and the value of (β) which refers to the medium positive relationships between the two variables.

- **Volatility of stock price**

First Hypotheses: (H_0) There is no impact of trading volume of financial companies' stock options on volatility of stock price.

TABLE 5 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON VOLATILITY OF STOCK PRICE OF FINANCIAL SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. National Bank	0.233	0.000	0.482	4.406
2. Kuwait International Bank	0.138	0.002	0.372	3.256
3. Burgan Bank	0.007	0.476	0.087	0.716
4. Kuwait Finance House	0.086	0.014	0.294	2.517
5. National Investments Company	0.260	0.000	0.510	4.855
6. Kuwait Projects Company	0.045	0.084	0.212	1.753
7. Al-Mal Investment Company	0.005	0.580	0.068	0.556
8. Gulf Insurance Company	0.111	0.018	0.334	2.453

Table 5 refers to the linear regression test of financial companies listed on Kuwait Stock Exchange, as we see most of financial companies have an impact of trading volume of financial companies' stock options on volatility of financial companies' stock price. Also the value of (sig) confirm this conclusion, which is less than 5% for most of these companies except three companies, and the value of Coefficient interpretation (R^2) shows the positive impact for companies' stock options trading volume on the volatility of stock price, also the value of (β) which indicates to the medium positive relationship between the two variables.

Second Hypotheses: (H_0) There is no impact of trading volume of industrial companies' stock options on volatility of stock price.

TABLE 6 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON VOLATILITY OF STOCK PRICE OF INDUSTRIAL SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. National Industries Group	0.071	0.024	0.266	2.307
2. Kuwait Pipes Industries & Oil Services	0.069	0.026	0.263	2.278
3. Heavy Engineering and Ship Building	0.548	0.000	0.740	9.011
4. United Industries Company	0.119	0.004	0.345	3.009
5. BOUBYAN Petrochemicals	0.017	0.294	0.129	1.058
6. Equipment Holding Company	0.169	0.001	0.411	3.377

This table shows the simple linear regression test for industrial companies, from the results of this test we see there is an impact of trading volume of industrial companies' stock options on volatility of industrial companies' stock price. The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on the volatility of stock price, and the value of (β) which refers to the medium positive relationships between the two variables.

Third Hypotheses: (H_0) There is no impact of trading volume of services companies' stock options on volatility of stock price.

TABLE 7 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON VOLATILITY OF STOCK PRICE OF SERVICES SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. Agility Public Warehousing	0.218	0.000	0.467	4.350
2. Mobile Telecommunications	0.197	0.000	0.444	4.120
3. Independent Petroleum Group	0.005	0.563	0.072	0.582
4. Sultan Center Food Company	0.135	0.002	0.368	3.167
5. National Mobile Telecommunications	0.131	0.004	0.362	2.958
6. Kuwait & Gulf Link Transport	0.299	0.000	0.547	5.428
7. Al-SAFWA Group Company	0.191	0.001	0.437	3.467
8. Livestock Transport & Trading	0.191	0.000	0.437	3.886
9. DANAH ALSAFAT Foodstuff	0.358	0.000	0.598	6.061

As we see from Table 7 that there are nine services companies, all of them have an impact of trading volume of services companies' stock options on the volatility of services companies' stock price. The Coefficient interpretation (R^2) indicates to the positive impact for companies' options trading volume on the volatility of companies' stock price, and the value of (β) which refers to the medium positive relationships between the two variables.

Fourth Hypotheses: (H_0) There is no impact of trading volume of real estate companies' stock options on volatility of stock price.

TABLE 8 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON VOLATILITY OF STOCK PRICE OF REAL ESTATE SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. Kuwait Real Estate Company	0.435	0.000	0.660	6.743
2. United Real Estate Company	0.186	0.000	0.431	3.823
3. National Real Estate Company	0.605	0.000	0.778	9.831
4. Arab Real Estate Company	0.297	0.000	0.545	5.195
5. Al-ENMA'A Real Estate Company	0.334	0.000	0.577	5.615
6. INJAZZAT Dev. Company	0.322	0.000	0.568	5.471
7. The Commercial Company	0.196	0.001	0.442	3.555

Table 8 refers to the statistical analysis of real state sector companies, which consists of seven companies, from the table there is an impact of trading volume of real estate companies' stock options on the volatility of real estate companies' stock price The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on the volatility of real estate companies' stock price, and the value of (β) which refers to the medium and strong positive relationships between the two variables.

- **Trading volume of stocks**

First Hypotheses: (H_0) There is no impact of trading volume of financial companies' stock options on trading volume of financial companies' stocks.

TABLE 9 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON TRADING VOLUME OF STOCK OF FINANCIAL SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. National Bank	0.037	0.122	0.192	1.569
2. Kuwait International Bank	0.039	0.108	0.197	1.850
3. Burgan Bank	0.185	0.000	0.431	3.934
4. Kuwait Finance House	0.193	0.000	0.440	4.009
5. National Investments Company	0.338	0.000	0.582	5.852
6. Kuwait Projects Company	0.580	0.000	0.762	9.483
7. Al-Mal Investment Company	0.235	0.006	0.485	2.983
8. Gulf Insurance Company	0.025	0.276	0.157	1.101

Table 9 refers to the linear regression test of financial companies listed on Kuwait Stock Exchange, as we see most of financial companies have an impact of trading volume of financial companies' stock options on trading volume of financial companies' stocks. Also the value of (sig) confirm this conclusion, which is less than 5% for most of these companies except three companies, and the value of Coefficient interpretation (R^2) shows the positive impact for companies' stock options trading volume on the trading volume of financial companies' stocks, also the value of (β) which indicates to the weak and medium positive relationship between the two variables.

Second Hypotheses: (H_0) There is no impact of trading volume of industrial companies' stock options on trading volume of industrial companies' stocks.

TABLE 10 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON TRADING VOLUME OF STOCK OF INDUSTRIAL SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. National Industries Group	0.024	0.197	0.154	1.302
2. Kuwait Pipes Industries & Oil Services	0.403	0.000	0.634	6.867
3. Heavy Engineering and Ship Building	0.507	0.000	0.712	8.295
4. United Industries Company	0.214	0.000	0.463	4.272
5. BOUBYAN Petrochemicals	0.300	0.000	0.548	5.316
6. Equipment Holding Company	0.291	0.000	0.539	4.791

This table shows the simple linear regression test for industrial companies, from the results of this test we see that an impact of trading volume of industrial companies' stock options on trading volume of industrial companies' stocks. The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on the trading volume of industrial companies' stocks, and the value of (β) which refers to the medium positive relationships between the two variables.

Third Hypotheses: (H_0) There is no impact of trading volume of services companies' stock options on trading volume of services companies' stocks.

TABLE 11 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON TRADING VOLUME OF STOCK OF SERVICES SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. Agility Public Warehousing	0.088	0.013	0.297	2.563
2. Mobile Telecommunications	0.256	0.000	0.506	4.878
3. Independent Petroleum Group	0.006	0.519	0.080	0.649
4. Sultan Center Food Company	0.259	0.000	0.509	4.732
5. National Mobile Telecommunications	0.488	0.000	0.699	7.442
6. Kuwait & Gulf Link Transport	0.287	0.000	0.536	5.274
7. Al-SAFWA Group Company	0.287	0.000	0.536	4.536
8. Livestock Transport & Trading	0.055	0.057	0.235	1.938
9. DANAH ALSAFAT Foodstuff	0.126	0.003	0.355	3.084

As we see from Table 11 that there are nine services companies, all of them have an impact of trading volume of services companies' stock options on the trading volume of services companies' stocks. The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on the trading volume of services companies' stocks, and the value of (β) which refers to the medium positive relationships between the two variables.

Fourth Hypotheses: (H_0) There is no impact of trading volume of real estate companies' stock options on trading volume of real estate companies' stocks.

TABLE 12 – SIMPLE LINEAR REGRESSION TEST FOR THE IMPACT OF STOCK OPTIONS TRADING ON TRADING VOLUME OF STOCK OF REAL ESTATE SECTOR COMPANIES

Company	R^2	Sig	β	T- calculated
1. Kuwait Real Estate Company	0.145	0.002	0.381	3.169
2. United Real Estate Company	0.366	0.000	0.605	6.075
3. National Real Estate Company	0.340	0.000	0.583	5.703
4. Arab Real Estate Company	0.537	0.000	0.733	8.617
5. Al-ENMA'A Real Estate Company	0.463	0.000	0.681	7.377
6. INJAZZAT Dev. Company	0.737	0.000	0.859	13.291
7. The Commercial Real Estate	0.086	0.031	0.293	2.213

Table 12 refers to the statistical analysis of real state sector companies, which consists of seven companies, from the table there is an impact of trading volume of real estate companies' stock options on the trading volume of real estate companies' stocks. The Coefficient interpretation (R^2) indicates to the positive impact for companies' stock options trading volume on the trading volume of real estate companies' stocks, and the value of (β) which refers to the medium and strong positive relationships between the two variables.

6. DISCUSSION AND RESULTS

The previous results indicate that the market value of companies listed on Kuwait Stock Exchange, which trade on financial options, are affected by the trading volume of these companies' stock options, as these companies enter into options contracts with "FORSA Financial Fund" which is considered as a market maker. If the contract is "call option", the exercising of this contract means that FORSA fund will buy these companies' shares at pre-determined price then the demand on these shares will arise. On the other hand if the contract is "put option", then the exercising of this contract means that FORSA fund will sell companies' shares and thus increase on the supply of shares, and ultimately change the market value of companies' stocks based on the fluctuation in supply and demand for these shares As we note that financial sector companies' market value especially banks aren't affected by the trading volume of stock options, and that could be due to the lack of exercising options contract on these companies' shares.

The previous results reflect the Kuwaiti companies' adoption for options contracts as an important instrument to hedge against exposure to the volatility of stock price risks, and as we see from this study options contracts are an effective instruments for hedging. When expecting an increase of a particular stock in the market the investor will buy this stock now to

sell it in the future at the higher price, but if the stock price decreased instead of increasing the investor in this case will lose or wait until it appreciate.

However using options contract will avoid falling into this kind of risks because if the investor expect the stock price to rise, he will obtain a call option contract "as we said before" and exercise it if the price goes into his expectations (increase), and if not (decrease) he will not exercise the contract and just lose the premium, thus, the investor avoids the losses resulting from the volatility of stock prices. These results illustrate the role played by options market in Kuwait Stock Exchange, and its impact on trading volume of companies' stocks that deal with options, as well as illustrate the application of such contracts in the market, which reflects the process of actual exercising of these contracts.

From the previous results it's clear that trading volume of options has a positive effect on trading volume of underlying stocks and this suggests that options contracts in Kuwait Stock Exchange are not just illusory speculations that used only for hedging But they are an important instruments used in market-making through the actual exercising of these contracts by the counterparties, and therefore the actual buying or selling of the underlying stocks which affects eventually on the trading volume of these stocks.

7. CONCLUSION

All companies must adopt options contracts because of its significant impact on the market value of those companies through the impact on the trading volume of companies' stocks and thus changes in the demand and supply of such shares which leads ultimately to changes in the value of shares of these companies in the market. The researcher recommends using options contracts from the perspective of the investor because of its role in achieving high and guaranteed profits, when exercising the option contract whether is call or put option at a pre-determined price and thereby yielding a capital gains resulting from the difference between buying and the selling price.

Also the researcher recommends the need to use financial options as a means of hedging to lock on the market stock price, thus avoiding the risk of exposure to volatility of stock prices and must taking into account the risks associated in dealing with financial options to avoid such risks and controlling the process of options trading, and not using it as a way to make high illusory speculations that can cause deterioration of the financial market Finally ,opening scope for other types of financial options, such as currencies and stock indexes options.

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