STUDY OF THE KNOWLEDGE BASED FIRMS OPERATION EFFECT BEFORE THE INITIAL PUBLIC OFFERING ON THE STOCK PRICE IN TEHRAN STOCK MARKET

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ABSTRACT
. By considering that the firms will be offered to the stock when they are in their best operation situation and originally will face stock price decline in a period, in this project the abnormality of stocks price decline, it means the amount of long term stock negative output of the 59 firms, which were offered to the Tehran stock market from 2003 to 2009, were studied by the use of adjusted purchase output and keeping method based on market index. The obtained results from data analysis shows the stock's price decline during a year after initial offering of express knowledge firm stocks in Tehran's stocks market. Among these three independent variables, profitability, financial risk, and firms' nominal value, 6 months after initial offering, the firms profitability variables and firms value will have relationship with the stock's price decline.

KEYWORDS: Price drop, Stock, Tehran Stock Market, The initial public offering of stock, The knowledge based Firms.

INTRODUCTION
One of the important economic and financial subjects is the public offering of the stocks of expression knowledge firms in the stock market, that due to its vast profit, lots of firms offer their stocks in the stock market to supply required capital for continuing the operations activity and expansion, but some of the problems of this field are the abnormalities related to the public offering of initial stocks including, underprice valuing, long term price decline and hot initial public offering.

METHODOLOGY
The methodology in this project is descriptive, and its type and aim are correlational and practical respectively.
By considering that the aim of this research is studying this issue that how the independent variables affect the dependent ones, so the best methods for analyzing the data are applying the Kelmograph- Smirnof test to check if the data are normal, and the plain linear regression to test the hypothesis. After collecting the information from financial bills and hope letters of new accepted Iranian firms in the Tehran's stock market, the Spss software was used for analyzing the data. By considering the limited content of the society, all firms of the society are studied as the statistical sample.

PROJECT FINDINGS
Dependent Variable
In this research, the dependent variable is: the stocks output in the long term period, which is obtained from the difference between the stocks output and markets index output in the long term period.
Independent Variable
The independent variables of the research are presented separately in the following:
The profitability of the firm before IPO, which is measured by the balanced average index of the profit before subtracting the tax three years earlier the initial public offering. The firm's financial risk, which is studied by the total ratio of the total debts to the total properties before the initial public offering. The firm's nominal value, which is determined by the amount of registered capital of the firm that is declared in the hope letter before the initial public offering.

In the current research, the following methods are used generally for collecting the data:
1. To compose the theoretical subjects and the theoretical topics of the research, the library studies including studying the books and newspapers, the thesis's and the interior and exterior articles, and searching in the databases (internet) and the previous researches were used.

2. The research statistical data were extracted from the financial bills and hope letters of the accepted firms in the Tehran's stock market, by the use of Rahavarde novin and Tadbirpardaz softwares, and also the Internet data bases of Tehran's stock market: tse.ir and iranbourse.com and the websites: fipiran.com and rdis.ir.

HYPOTHESIS TEST
Testing the first hypothesis
There is a meaningful relationship between firm's profitability and stock's price fall in the initial public offering.
One month term:

Table 3.4; table ANOVA- the first hypothesis model sufficiency test

Time Section	Correlation Coefficient R	Determination Coefficient R2	F Statistic	Meaningfulness Level (Sig)	Camera- Watson
One month term	0.181	0.033	1.89	0.175	2.169

The determination coefficient (R2) is a standard which describes the strength of the relation between the dependent variable and independent variable. The amount of these coefficients in fact determines that how percent of dependent variables changes will be described through independent variable. In this model, R2= 0.033. It means that 3% of dependent variable changes (stocks output) is describable by the independent variable (firms profitability one month after initial offering).
Another feature of the regression observations is that the remainders are independent from each other. The test that evaluates this feature is Camera-Watson test.
The related number of Camera-Watson model is 2.169, the hypothesis of lack of correlation between the errors will not be rejected, and the regression can be used (1.5< 2.169< 2.5).
The above table, which is the variance analysis table (ANOVA), examines the optimum model and determines if the regression model is a meaningful option or not.
By observing the existed information in the above table, the F statistic and its meaningfulness level which is equal to 0.175, because sig=0.175>0.05, so the regression is not meaningful and there is no meaningful relation between firms profitability and stock's price fall in the first month.

6 month term:

Table 4.4, table ANOVA- the first hypothesis model sufficiency test

Time Section	Correlation Coefficient R	Determination Coefficient R2	F Statistic	Meaningfulness Level (Sig)	Camera- Watson
6 month term	0.29	0.088	5.53	0.022	1.549

In this model, the determination coefficient is R2=0.088. It means that 8% of the dependent variable changes (stocks output) are describable through the independent variable (firms profitability six month after initial offering).
The related number of Camera-Watson model is 1.549, the hypothesis of lack of correlation between the errors will not be rejected, and the regression can be used (1.5< 1.549< 2.5).
By observing the existed information in the above table, F statistic and its meaningfulness level are equal to 1.022, because sig=0.022<0.05, so the regression is meaningful and is a linear model.

Table 5.4: the table of first hypothesis regression coefficients

Time section	Independent Variable	Dependent Variable	Standard β	Statistic t	Meaningfulness level (sig)
six month term	Firms profitability	Stocks long term output	0.29	2.3	0.022

By considering β and meaningfulness level, the hypothesis of existence of the correlation between firms profitability and stocks output will be confirmed at the end of the sixed month and at the confidence level of 95%; the firms profitability has the direct relationship with the stocks output, it means that stock's price fall will be reduced with the profitability increase.

The second hypothesis test
There is a meaningful relation between firm's financial risk and stocks price fall in the initial public offering.
In this research, the selected standard for calculating firm's financial risk, the total ratio of debts to the total property will be used before the initial public offering.
One month term:

Table 6.4: table ANOVA- the second hypothesis model sufficiency test

Time Section	Correlation Coefficient R	Determination Coefficient R2	F Statistic	Meaningfulness Level (Sig)	Camera-Watson
1 month term	0.226	0.051	3.012	0.088	2.114

The determination coefficient in this model is R2=0.051. It means that 5% of the dependent variable changes (stocks output) are describable by the independent variable (firms financial risk one month after initial offering).
The related number to the Camera-Watson model is equal to the 2.114, so the hypothesis of the lack of correlation between the errors will not be rejected and the regression can be used (1.5<2.114<2.5).
By observing the existed information in the above table, the F statistic and its meaningfulness level are equal to the 0.088, because sig=0.088>0.05, so the regression is not meaningful and there is no meaningful relation between firms financial risk and stock's price fall.
Six month term:

Table 7.4: table ANOVA- the second hypothesis model sufficiency test

Time Section	Correlation Coefficient R	Determination Coefficient R2	F Statistic	Meaningfulness Level (Sig)	Camera-Watson
6 month term	0.049	0.002	0.137	0.713	1.695

The determination coefficient (R2) in this model is R2=0.002. We can say that the independent variable (the firm's financial risk six month after initial offering) does not have the ability to describe the dependent variable changes (stocks output).
The related number to the Camera-Watson model is equal to the 1.695, so the hypothesis of the lack of correlation between errors will not be rejected and the regression can be used (1.5<1.695<2.5).
By observing the existed information in the above table, the F statistic and its meaningfulness level are equal to 0.713, because sig=0.713>0.05, so the regression is not meaningful and there is no meaningful relation between the firm's financial risk and the stock's price fall at the end of sixth month.

The third hypothesis test
There is a meaningful relation between the firm's nominal value and the stock's price fall in the initial public offering.
In this research, the selected standard for calculating the firm's nominal value is the amount of firms registered capital before the initial public offering.
One month term:
Table 8.4: table ANOVA- the third hypothesis model sufficiency test

Time Section	Correlation Coefficient R	Determination Coefficient R2	F Statistic	Meaningfulness Level (Sig)	Camera-Watson
1 month term	0.139	0.019	1.097	0.299	2.158

The determination coefficient (R2) in this model is R2=0.019. It means that 1% of the dependent variable changes (stocks output) are describable by the independent variable (firms nominal value one month after initial offering).

The related number to the Camera-Watson model is equal to the 2.158, so the hypothesis of the lack of correlation between the errors will not be rejected and the regression can be used (1.5<2.158<2.5).
By observing the existed information in the above table, the F statistic and its meaningfulness level are equal to 0.299, because sig=0.299>0.05, so the regression is not meaningful and there is no meaningful relation between the firm's nominal value and the stock's price fall at the end of first month.
Six month term:

Table 9.4: table ANOVA- the third hypothesis model sufficiency test

Time Section	Correlation Coefficient R	Determination Coefficient R2	F Statistic	Meaningfulness Level (Sig)	Camera-Watson
6 month term	0.292	0.085	5.321	0.025	1.52

The determination coefficient (R2) in this model is R2=0.085. It means that 8% of the dependent variable changes (stocks output) can be described by the independent variable (firms nominal value six month after initial offering). The related number to the Camera-Watson model is equal to the 1.52, so the hypothesis of the lack of correlation between errors will not be rejected and the regression can be used (1.5<1.52<2.5).
By observing the existed information in the above table, the F statistic and its meaningfulness level are equal to 0.025, because sig=0.025>0.05, so the regression is meaningful and is a linear model.

Table 10.4: the table of the third hypothesis regression coefficients

Time section	Independent Variable	Dependent Variable	Standard β	Statistic t	Meaningfulness level (sig)
six month term	Firms nominal value	Stocks long term output	0.29	2.307	0.025

By considering β and meaningfulness level, the hypothesis of existence of the correlation between firms nominal value and stocks output will be confirmed at the end of the sixed month and at the confidence level of 95%; the firms nominal value has the direct relationship with the stocks output, it means that stock's price fall will be reduced with the increase of the amount of firms registered capital in the initial offering.

CONCLUSION
The total analysis of the obtained results may show that the past performance is not such a good predictor for the future performance of the firm; in addition, possibility to access the information is very limited for Tehran's stock capitalists in the time of the first offer to the stock, therefore after that the firms entered the stocks market, and by considering the mid-term financial report presentations that stock market requested, these information will affect people's decision making.

1. **The results of testing the first hypothesis**
The first hypothesis: there is a meaningful relationship between the firm's profitability and the stock's price fall.
2. **The results of testing the second hypothesis**
The second hypothesis: there is a meaningful relationship between firm's financial risk and stocks price fall in the initial public offering.
This hypothesis, with 95% confident and based on regression test, wasn't accepted, it means that there is no meaningful relationship between the firm's financial risk and stocks price fall.
3. **The results of testing the third hypothesis**
The third hypothesis: there is a meaningful relationship between the firm's nominal value and the stock's price fall in the initial public offering.
This hypothesis, with the 95% confident and based on the regression test was accepted, it means that there is a meaningful relationship between firms nominal value (the amount of registered capital) and stock's price fall.
In one month period:

1.5 table: the final result of acceptance or rejection of the research hypothesis in the one month period		
hypothesis	explanation	result
H1	There is no meaningful relationship between the firms profitability and the stock's price fall in the initial public offering	rejection
H2	There is a meaningful relationship between the firm's financial risk and the stock's price fall in the initial public offering	rejection
H3	There is no meaningful relationship between the firms nominal value and the stock's price fall in the initial public offering	rejection

In the six month period:

2.5 table: the final result of acceptance or rejection of the research hypothesis in the six month period		
hypothesis	explanation	result
H1	There is a meaningful relationship between the firms profitability and the stock's price fall in the initial public offering	acceptance
H2	There is a meaningful relationship between the firm's financial risk and the stock's price fall in the initial public offering	rejection
H3	There is no meaningful relationship between the firms nominal value and the stock's price fall in the initial public offering	acceptance

REFERENCES

Bradley D. and Brad J. (2001). *Partial adjustment to public information and IPO underpricing*. *J. Financial* and Quantitative Analysis. http://www.jstor.org.

Chi Jina and Padgett Carol. (2002). *The performance and Long-run Charactristic of the Chines IPO Market*. ISMA Centre Discussion Paper No. 2002-09   http://ssrn.com/abstract=309931.

Gregory A., Guerma C. and Fawaz A. (2009). *UK IPOs: Long Run Returns, Behavioural Timing and Pseudo Timing*. Centre for Finance and Investment. 60-80.   http://ssrn.com/abstract=1291051.

Jog V. and Mc Conomy B. (2003). *Voluntary Disclosure of Management Earnings Forecasts in IPO Prospectuses*. *J. Business, Finance and Accounting.* 30: 125-167. http://ssrn.com/abstract=402261.

Lowry Michelle B. and Murphy Kevin J. (2006). *Executive Stock Options and IPO Underpricing*. ***http://ssrn.com/abstract=745684.***

Ofek E. and Richardson M. (2003). *Dot-Com Mania: The Rise and Fall of Internet Stock Prices*. *J. Finance.* 58: 1113-1138. http://www.nber.org/papers/w8630.

Schultz (2001). *Pseudo Market Timing and the Long-Run Under performance of IPOs. J. Finance.* 58: 483-518. http://ssrn.com/abstract=416654 .

Schwert G and William (2003). *Anomalies and market efficiency*. Handbook of the economics of finance, North-Holland, Amsterdam.

Susana Y. and Leistikow D. (2011). *Abnormal stock returns, for the event firm and its rivals, following the event firm's large one-day stock price drop*. Managerial Finance. 37(2):151-172. www.emeraldinsight.com/0307-4358.htm.

Thomas L. Ronald. (2001). *The Irwin guide to stocks, bonds, futures and options: A comprehensive guide to Wall street's markets*. 1st edition, Publisher: McGraw-Hill Companies.

 Yewmun Y., Yuli S. and Jiun B. (2009). *Effects of underwriters, venture capital and industry on long-term initial public offering performance*. Managerial Finance. 35(8)2009:700-715.   www.emeraldinsight.com/0307-4358.htm.