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Analysis and Diagnosis of Calendar Effect in Tehran Stock Exchange

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ABSTRACT

This research has been done in order to examine the efficiency of Tehran Stock Exchange from a new aspect that challenges the Weak Efficiency Hypotheses and its main goal is analysis and recognition of calendar effect in Tehran security exchange during different months. For evaluating and testing our claim about the meaningful different return, trades volume and variability of return during different month of year we calculated the dependent variables of market return, trades volume and variability of market return by using data of the Overall Index of Tehran Stock Exchange (from April of 2002 up to September of 2009) and then by using virtual variables of months the regression between the dependent variables modeled. At the other hand this phenomena has been analyzed in 34 different industry listed in Tehran Stock Exchange separately. Analyzing the 37 regression equation resulted from our modeling, shows the variation of month during the years affects variables of the market return and its volume and variability and consequently implying the lack of Weak Efficiency Hypotheses in Tehran Stock Exchange market in low level.

KEY WORDS: Calendar effect, efficient market hypothesis, Monthly Effect, ARCH/GARCH Model, Tehran Stock Exchange, emerging markets.

JEL Category:
C12, C13, G14, C22, G12

1. INTRODUCTION

Anticipation of costs of listed security in exchange market is one of challenging issues of financial managing and investment. There are different approaches classifying to two categories: rational and behavioral.

Rational approach mainly includes topics that classic investment and financial school suggests and the most important rational approach is “fundamental approach” which is derived from scientific and academic societies and according to basic and logical financial principles expresses that the value of each asset equals to the sum of current value of cash flows expected for that asset. In this approach studying 3 items including market, industry and company, securities are sold and bought by use of discount model of cash flows or partial evaluation.

Behavior or non-rational approach believes to effect of psychological and behavioral issues on financial and investment decision making and generally pricing. This approach attempts to anticipate processes and direction of prices and trends by studying simultaneously sociology, psychology, behavior studies, patterns of decision making and behavioral models. For instance, in this approach excessive reaction or vice versa or market response to new information or market sensitivity to specific information and news are considered.

For those who consider psychology role in financial knowledge obvious as an impact factor on securities exchange and investment decisions, acceptance of hesitation about behavioral credit is difficult. At the same time still many scientists and partisans of classic financial school don’t believe in studying aspects of human behavior and its effect on financial decisions as an independent branch of study. On the other hand, partisans of behavioral financial knowledge firmly believe that awareness of psychological tendencies in investment areas is quite necessary and requires developing study domain. Due to these issues and to expand financial literature which breadth and depth and richness is very little, and also due to necessity of updating in nowadays knowledge in the world, at least in basic territory, this research is devoted to studying of one of the newest financial management topics, behavioral financial knowledge dealing to study of behavior of capital market and study of psychological and behavioral aspects of capital market. In this domain, one of interesting topics is “calendar effect” paying attention to behavioral

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dissonance and market performance in different months. Overall this research has focused on "effect of different months", and is to detect calendar effect on Tehran stock exchange market by analysis of this effect on this market.

The research has been done in order to study the efficiency of Tehran Stock Exchange from new aspect that challenges the market efficiency in low level during 5 years (April2003_ to end of September 2008), and its goal is analysis and detection of calendar effect on Tehran Stock Exchange during different months. Furthermore one of its main goals is helping investors of Tehran Stock Exchange to detect effective factors on pricing and general situation of Tehran Stock exchange better and recognize behavioral effects of Tehran Stock Exchange during different months. Generally the research is placed in behavioral financial knowledge frame and by refusing perfect rationality and market proficiency establishes new paradigms and creates new approach to financial management. In this research market proficiency is tested by new method specifically and logically.

2. RESEARCH BACKGROUND

Few studies have been done about the studied topic in this research in the country; so this research lacks domestic experimental and scientific background. Thus what is done in this research is more based on studies and researches done abroad.

For the first time, Fields in 1931 studied effect of weekdays on US securities exchange. He evaluated standard logic of Wall Street which addresses stock exchange visitors don't tolerate non-confidence of their stocks assets in weekend. Therefore, they prefer to convert them to other accounts. In result, securities prices decreases on Saturday.

Fields examined Daw Jones index during 1915-1930 to study correctness of standard logic. He compared the last Daw Jones price on Saturday with the average of last prices between Friday to Monday. He found that prices tend to increase on Saturdays. In 52% of 717 weeks considered by him, Saturday price was more than 10$ higher than average of Friday to Monday.

Also Fama in 1965 found that efficiency variance on Monday is 20% more than efficiency variance on other weekdays. Cross in 1973 studied efficiency of S&P500 index during 1953 to 1970 too. He receipted that in 62% of Fridays, mentioned index is greater. Average of efficiency was 12% on Fridays, while it was -18% on Mondays. In other words, the average of efficiency on Fridays was more than other days. He also realized that the average of efficiency on Mondays is less or even negative.

Again French in 1980 investigated S&P500 index during 1953 to 1977 to study daily efficiencies and gain similar results. He presented hypothesis of stock exchange time which addressed revenues only were created during workdays. This hypothesis referred that revenues should be equal on normal days of trading stocks. Of course he offered another alternative hypothesis named calendar time hypothesis. Therefore, revenue of Monday should be 3 times more than revenue of normal days of trading stocks.

Smirlock and Staks in 1986 did confirm French results and Gibbons and Hess's results in 1981 approved the effect of weekdays on S&P500 index and data of research center about securities prices during 1962 to 1978.

Gradually the domain of this researches extended outside United States and Europe. Jeff and Westerfield confirmed this issue in 4 bourses; in England, Australia, Japan, and Canada.

These researches in 1990 decade were attracted scientists more. With progress of researches in variability and introducing GARCH models, new tests approach started evaluating efficiency and variability in weekdays simultaneously.

In 2002, Kootez examined existence of weekend effect on Johannesburg securities exchange during 1987 to 1997. They used a sample and 3 subsamples with same times for analysis. Weekday's effect only was observed in one subsample.

In 2003, Brument and Kiymaz investigated transaction volumes besides efficiency and variability.

Ajayi, Mehdian and Perri in 2004 studied weekdays effect on 11 newfound markets in East Asia and found that in 6 markets the average stock was negative on Monday.

Gayen in 2005 expressed that the stocks having low price are better than stocks with higher stocks.

Hwan in 2005, by examining S&P500 index and how the price of stocks of corporations entering to this index or exiting it changes, stressed that the price of stocks of corporations added to index like S&P500 increases rapidly and by being listed in this index gain unusual revenue.

Jones and Ligon in 2007 by comparing between IPOs presented on Mondays and other weekdays resulted that the efficiency of IPOs on Monday is less than other weekdays. They suggested that early release should be made except Monday to prevent seasonal effects.

Dennis and Westen in 2008 presented evidences of US securities exchange revealed that institutional investors have more information than real investors.

Doyle and Chen in their research in 2009 express that the effect of weekdays can shift over time; they address this issue as reason of different founding of researchers.

Also Sun and Stiver in 2009 has stated 3 possible interpretations:

1. The calendar effect is affected by international pricing risk factor.
2. The calendar effect can be derived from behavioral tendencies.
3. The calendar effect can be admitance undesirable situation; as Schewer reached this conclusion in 2003.

Sun and Tong in 2010 stated that the month effect phenomenon is still attractive for financial scientists. They studied risk topics suggested by Rozeff and Kinney in 1976 and Rogalsky and Tinic in 1986, by use of time series approach specially GARCH model. They found that if higher risk in January is reason of calendar effect phenomenon, implementation of GARCH model can explain contradictions of January in statistics. In this research they found that risk reward, not risk itself, is higher in January.

Marshall and Visaltanachoti in 2010 studied portfolio managers interesting fields, individual investors and corporation managements trying increase property or corporations are to establish IPO.

They understand that the January effect can't be beneficial for achieving to excess revenues economically and statistically. So the calendar effect isn't an evidence of violation of market efficiency.

Raaei and Bajelan in 2008 tried to detect and model calendar effect of Tehran Stock Exchange during 1380 to 1385 based ondigits related to the general index of Tehran Stock exchange. The conclusion of this research was detection of mentioned effect on Tehran Stock exchange. General result of this research identified negative coefficient in both OLS and GARCH models in October and March.

Raaei and Shirzadi in 2008did a research monthly based on index of cash returns and total return and transaction volume of Tehran Stock exchange using E-views software. The findings show that no unusual change in monthly transaction volume and total return of market occurs in March. In addition, transaction volume in July is less than other months. However, effect of this month on the market monthly return is not noticeable and it can't be confirmed. On the other hand, transaction volume in April is negative meaningfully and also is gained efficiency. According to the research findings, the market efficiency is decreased in August.

IslamiBidgoli and Nabizadeh in 2009 identified the market efficiency on Saturday positive, unlike other countries bourses being negative on Saturday. On the other hand, unlike researches done about other countries bourses showing that real investors' behavior is one of factors in existing weekend effect, in Tehran Stock Exchange, transactions pattern of both groups of investors is effective on mentioned effect. Beside, due to that on Saturday the amount of transaction of institutional and real investors is low, initial offer should be every day except Saturday.

Another research done by Aboonouri and Izadi in 2006 indicates negative effect on Saturday and Wednesday. Results related to industries indexes have referred to existence of weekday's effect in 9 industries among 15 industries. So totally by identifying meaningful weekday effect and recruiting it in investment decisions, it is possible to gain returns derived from information analysis in Tehran security exchange; the fact having conflict with labor market hypothesis.

Another research done by Asadi and Khadem in 2007 indicates that revenue has meaningful difference between days before and after occasion holidays and other days in Tehran Stock Exchange; in addition, holidays have great effect on revenue. On the other hand they found that transaction volume in days before and after occasion holidays doesn't equal to other days' in Tehran bourse and so holidays don't have significant effect on transaction volume.

Badri and Sadeghi in 2006, showed weekdays effect on returns, transaction volume and variability in Tehran stock exchange. Wednesday effect (weekend effect) and also Sunday effect have been significant in most of the estimations. There are also direct relationship between daily variability and returns,inverse relationship between daily transaction volume return, and inverse relationship between daily variability and transaction volume. In addition, this research challenges Tehran bourse poor efficiency hypothesisby approving weekdays' effect on Tehran bourse.

3. HYPOTHESES TESTING

As far as the research hypotheses are numerous and extensive and its output volume is high, so merely for explaining method of hypotheses tests, studying outputs related to the research first hypothesis is sufficient:

According to the first main hypothesis, calendar effect of average revenue on Tehran stock market is observed and we use H_0 as contradictory claim and H_1 as claim for testing accuracy of this claim. In other words:

"There is calendar effect of revenue average in Tehran security exchange".

H_0= ρ_1=0 There isn't calendar effect of revenue average in Tehran security exchange.

H_1=$\rho_1 \neq 0$ There is calendar effect of revenue average in Tehran security exchange.

For studying calendar effect on security exchange revenue, all variables including transaction volume and variability rate of market output, entered to model as control variables with all fictitious variables mentioned, and regression model of least squares linear has fitted for it stepwise and backward. It is obvious that variables not meaningful statistically were omitted in backward model. So following output is final one after omitting meaningless variables. On the other hand, in following model, there are variables titled DUM; these variables are fictitious that their values are only zero and one. These variables have been used to destroy effect of Perth data on model so that all values of these variables are zero except values having variables desired for Perth data. Therefore, this fictitious variable is 1 for that Perth data. So not only the researcher hasn't omitted Perth data, but also somehow has allowed their attendance subject to fictitious variables.

As is clear in next page model, Dkhordad variable is such variables having significant effect on dependant variable, index variable; this issue is conceived of t statistic rate and also Prob rate. For instance, when Prob of Dkhordad variable is 0.0240, we can conclude that this variable has meaningful effect on INDEX variable statistically. So zero hypotheses which are contradictory claim are rejected and hypothesis claim is approved. On the other hand, positive sign of estimated coefficient for Jun (Khordad) represents significant increase of security exchange in comparison with other months. This theorem is not far-fetched practically either; because communities season of most of bourse corporations is in July (Tir) and most of investors will purchase shares because of attending in communities and gaining dividends. This matter leads to significant increase of demand in month ending to communities' month, Jun (Khordad), spontaneously.

R2 rate for this model is 0.33, a relatively good rate in comparison with other researches of financial markets. But for more confidence, the researcher has gone unto studying contradictory classic hypothesis of regression to control items one after another.

Dependent Variable: INDEX
Method: Stepwise Regression
Date: 09/30/10 Time: 23:27
Sample: 1 66
Included observations: 66
Number of always included regressors: 1
Number of search regressors: 11
Selection method: Stepwise backwards
Stopping criterion: p-value forwards/backwards = 0.05/0.05

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
DUM1	27.12120	4.662689	5.816643	0.0000
DKHORDAD	4.400025	1.903535	2.311503	0.0240

R-squared	0.339710	Mean dependent var	1.434761
Adjusted R-squared	0.329393	S.D. dependent var	5.693802
S.E. of regression	4.662689	Akaike info criterion	5.946896
Sum squared resid	1391.403	Schwarz criterion	6.013249
Log likelihood	-194.2476	Hannan-Quinn criter.	5.973115
Durbin-Watson stat	1.374329		

Selection Summary

Removed DMORDAD
Removed DSHAHRIVAR
Removed DMEHR
Removed DDAY
Removed DESFAND
Removed DORDIBEHESHT
Removed DBAHMAN
Removed DTIR
Removed DFARVARDIN
Removed DAZAR

*Note: p-values and subsequent tests do not account for stepwise selection.

Figure 1. Final Output for First Hypothesis

3.1 TESTING NORMALITY OF ERRORS

Following output is related to model errors histogram. As it is clear these errors have normal distribution and their histogram shows very close to normal distribution. So we can say that model errors distribution has normal distribution. Rate of P-value for quartile test has reported 0.12; this test confirms being normal of model errors.

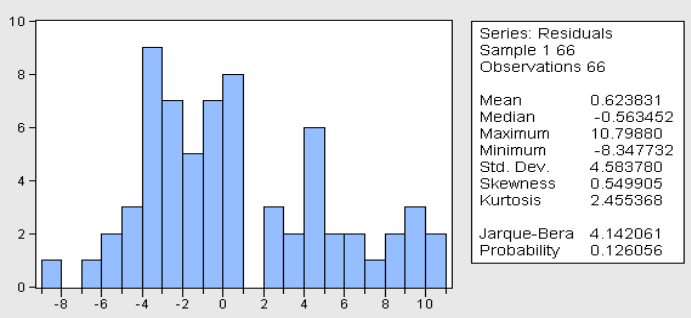

Figure 2. Testing Normality of Errors

3.2 SERIAL CORRELATION TEST

LM test or LaGrange correlation is used for testing serial correlation and the output of this test is given in the following.

As the output comes, we can conclude that the fit model doesn't have serial correlation. Because as Fisher statistic rate of this test is represented above this table, 2.17 and also Prob rate, 0.10, indicated not rejection of H_0 hypothesis, lack of correlation. So we can conclude that the fit model doesn't suffer correlation.

1.1 TEST OF ARCH AND GARCH EFFECTS

ARCH test has been used for testing whether this model has ARCH or GARCH effects. The following output showing Fisher statistic rate 1.75 and Prob 0.18 represents lack of GARCH and ARCH effects. Therefore we can certainly say that statistically there is not any ARCH and GARCH effect in fit model.

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.173597	Prob. F(3,61)	0.1003
Obs*R-squared	5.252539	Prob. Chi-Square(3)	0.1542

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 09/30/10 Time: 23:30
Sample: 1 66
Included observations: 66
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DUM1	-2.999910	4.822622	-0.622050	0.5362
DKHORDAD	-0.338908	1.894406	-0.178899	0.8586
RESID(-1)	0.308785	0.129399	2.386305	0.0201
RESID(-2)	0.006353	0.140365	0.045258	0.9640
RESID(-3)	0.061570	0.135887	0.453101	0.6521

R-squared	0.079584	Mean dependent var	0.623831
Adjusted R-squared	0.019229	S.D. dependent var	4.583780
S.E. of regression	4.539496	Akaike info criterion	5.936243
Sum squared resid	1257.029	Schwarz criterion	6.102126
Log likelihood	-190.8960	Hannan-Quinn criter.	6.001792
Durbin-Watson stat	1.920380		

Figure 3. LM Test for Serial Correlation

Heteroskedasticity Test: ARCH

F-statistic	1.756352	Prob. F(1,63)	0.1899
Obs*R-squared	1.762960	Prob. Chi-Square(1)	0.1843

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 09/30/10 Time: 23:31
Sample (adjusted): 2 66
Included observations: 65 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	17.36035	4.376958	3.966306	0.0002
RESID^2(-1)	0.164395	0.124046	1.325274	0.1899

R-squared	0.027122	Mean dependent var	20.84490
Adjusted R-squared	0.011680	S.D. dependent var	28.37779
S.E. of regression	28.21158	Akaike info criterion	9.547628
Sum squared resid	50141.26	Schwarz criterion	9.614532
Log likelihood	-308.2979	Hannan-Quinn criter.	9.574026
F-statistic	1.756352	Durbin-Watson stat	1.879931
Prob(F-statistic)	0.189866		

Figure 4. Test of ARCH/ GARCH Effects

1.2 VARIANCE DISSONANCE TEST

Following output is related to variance dissonance test. White test has been used to test dissonance variance existence.

As this output indicates Fisher statistic rate 0.95 and Prob 0.39, existence of variance dissonance for the model is not seen.

Heteroskedasticity Test: White

F-statistic	0.955843	Prob. F(2,63)	0.3900
Obs*R-squared	1.943738	Prob. Chi-Square(2)	0.3784
Scaled explained SS	1.613170	Prob. Chi-Square(2)	0.4464

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 09/30/10 Time: 23:31
Sample: 1 66
Included observations: 66
Collinear test regressors dropped from specification

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.11013	3.677000	5.469167	0.0000
DUM1^2	-20.11013	28.48192	-0.706066	0.4827
DKHORDAD^2	14.04075	12.10249	1.160154	0.2504

R-squared	0.029451	Mean dependent var	21.08186
Adjusted R-squared	-0.001361	S.D. dependent var	28.22438
S.E. of regression	28.24357	Akaike info criterion	9.563998
Sum squared resid	50255.05	Schwarz criterion	9.663528
Log likelihood	-312.6119	Hannan-Quinn criter.	9.603327
F-statistic	0.955843	Durbin-Watson stat	1.613130
Prob(F-statistic)	0.389992		

FIGURE 5. White Test for Variance Dissonance

2. RESEARCH HYPOTHESES

Quad hypotheses of the research include:

- First main hypothesis: There is calendar effect of revenue average in Tehran Stock exchange.
  According to this hypothesis the average of total revenue of Tehran Stock Exchange is various in different months.
- Second main hypothesis: there is calendar effect of transaction volume in Tehran stock market.
  According to this hypothesis, the transaction volume of Tehran Stock Exchange is various in different months.
- Third main hypothesis: there is calendar effect of variability rate of revenue in Tehran Stock Exchange.
  According to this hypothesis, the variability of revenue of Tehran Stock Exchange is various in different months.
- Forth main hypothesis: type of industry affects on the calendar effect of revenue.
  According to this hypothesis, the revenues of different industries in Tehran Stock Exchange are various in different months.

4. THE RESULT OF HYPOTHESES' TESTS

First main hypothesis: According to this hypothesis the average of total revenue of Tehran Stock Exchange is various in different months. After entering average revenue variable as dependent variable and fictitious variable of each one of 12 months, it is observed that Jun (Khordad)has positive direct effect on Tehran Stock Exchange during different years studied. There isn't such effect in other months. Considering the significance of independent variable coefficient (one of months) it can be reduced that the calendar effect of average revenue on Tehran Stock Exchange is existed and there is the calendar effect of average revenue in Tehran Stock Exchange.

Second main hypothesis: According to this hypothesis, the transaction volume of Tehran Stock Exchange is various in different months. After entering transaction volume variable as dependent variable and fictitious variable of each one of 12 months, it is observed that fictitious variable of September (Mehr), April (Farvardin) and August (Mordad) and transaction volume during different years has negative effect on transactions volume.It can be concluded that during April (Farvardin), September (Mehr), and August (Mordad)of studied years, transaction volume has been reduced and there has been the calendar effect on transaction volume in Tehran Stock Exchange. So the second hypothesis expressing that transaction volume of Tehran Stock exchange is different was confirmed.

Third main hypothesis: According to this hypothesis, the variability of revenue of Tehran security exchange is various in different months. After entering the variable of revenue variability as dependent variable and fictitious variable of each one of 12 months in regression model, it is observed that August (Mordad)has positive and significant effect on variability of Tehran Stock Exchange.In other words, it is expected that fluctuations of revenue of Tehran security exchange in August(Mordad) is more than other months. So third main hypothesis expressing variability of revenue of Tehran Stock Exchange is different was confirmed.

Forth main hypothesis: According to this hypothesis, the revenue of several industries of bourse is various in different months. By use of industry index, monthly revenue of different industries was calculated as dependent variable to study the calendar effect of different industries' revenue of security exchange. Single for each industry, the regression was fitted that its dependent and independent variable were revenue of that industry and fictitious variable of each month respectively. The result of these 37 regressions represents that various revenues have been

observed in 21 industries from 37 one existed in Tehran security exchange during different months. In other words, the calendar effect of average revenue in different bourse industries was seen.

5. CONCLUSION

According to hypotheses tests and the results of them we can conclude that there is calendar effect in Tehran Stock Exchange; which effect was confirmed in different months in terms of revenue, variability, and transaction volume. Furthermore, in different industries, we observed the calendar effect of average revenue in Tehran Stock Exchange separately. So according to the result, the Weak efficiency of Tehran Stock Exchange is doubted.

6. SUGGESTIONS

1. It is recommended to investment managers and Stock market analysts that according to the existence of calendar effect in Tehran Stock Exchange, pay attention to time of entering or leaving the market as well as fundamental issues.
2. Studying different months' effect on other economy markets like money market, financial market and commodity market can be attractive. While it can be beneficial in explaining this phenomenon.
3. Privatization organization and other institutions offering to Tehran Stock Exchange can perform appropriate timing in successful supply of securities in bourse.
4. The results of this research may have key role for 3 following groups:
   - Securities and exchange organization; because as the country's stock market investment policy, this organization can use the results of this research for market adjustment.
   - Tehran exchange investors: the results help to this group to gain more revenue (or tolerating lower risk).
   - Analysts: as they concentrate on trend of prices, returns, volatility, and trading volume and the relationship between them, the results can be useful for analyzing various indexes, risk and relationship between variables.

REFERENCES

1. Aboonouri E, Izadi R, "Valuation Of Days Effect In Tehran Stock Exchange Using Arch And Garch Model", Journal Of Economic Research, 2010, No.7
2. Abraham A, 'The Individual Investor And The Weekend Effect", Journal Of Financial And Quantitative Analysis, 1994, No.29, 263-277
3. Ariel A, 'High Stock Return before Holidays: Existence and Evidence on Possible Causes", Journal Of Finance, 1990, No.45, 1611-1626.
4. Badri A, Sadeghi M, "Identifying Of Days Effect On Productivity, Quality And Volume Fluctuations In Tehran Stock Exchange", SHAHID BEHESHTI University, 2006
5. Balaban E, 'January Effect, Yes! What About Mark Twain Effect?", Research Department Of The Central Bank Of The Republic Of TURKEY, 1995, Discussion Paper No: 9509
6. Barberis N, Thaler R, "A Survey Of Behavioral Finance", Handbook Of Economic Finance , North Holland , Smesterdam, 2001
7. Bepari K, Mollik A, "*Seasonalities In The Monthly Stock Returns: Evidence From Bangladesh Dhaka Stock Exchange (DSE)*", International Research Journal Of Finance And Economics, 2009, ISSN 1450-2887, Issue 24
8. Bhardwaj R, Brooks L, 'The January Anomaly: Effect Of Low Share Price, Transaction Cost, And Bid-Ask Price", Journal Of Finance, 1992, No. 47, 553-575
9. Blume L, EasleyD and Ohara M , "Market Statistic And Technical Analysis ;The Role Of Volume" ,The Journal Of Finance, 1994, Vol.XLIX, No.1
10. Buman S, Jacobson B, 'The Halloween Indicator, Sell In May And Go Away: Another Puzzle", American Economic Review, 2002, No.92, 1618-1635
11. Campbell J.Y, Grossman S.J and Wang J, "Trading Volume And Serial Correlation In Stock Return" , Quaterly Journal Of Economics, 1993, 905-939

12. Connolly R, 'An Examination Of The Robustness Of The Weekend Effect", Journal Of Financial And Quantitative Analysis, 1989, No.24, 133-169
13. Daniel K Hireshlifer D and Subrahmanyan A, 'Investor Psychology And Security Market Under And Overreaction" , Journal Of Finance , 1989, Vol.53, 1839-1885
14. DeBont W, "Introduction to the Special Issues on Behavioral Finance", Journal Of Empirical Finance, 2004, Vol.11, 423-427.
15. DeBont w, Thaler R, "Does The Stock Market Overreact?", Journal Of Finance, 1985, No.40 , 793-805
16. Dennis P, Weston J, "Who's Informed; An Analysis Of Stock Ownership And Informed Trading", http://ssrn.com/abstract=267350, 2008
17. Easterday K, Sen P and Stephan J, "*The Persistence Of The Small Firm/January Effect: Is It Consistent With Investors' Learning And Arbitrage Efforts?*", The Quarterly Review Of Economics And Finance, 2009, Vol.49, 1172–1193
18. Fama E.f, "Efficient Capital Market ; A Review Of Theory And Empirical Work ", Journal Of Finance, 1970, No.1 ,384-417
19. Fama E.F, "Market Efficiency, Long Term Results And Behavioral Finance", Journal Of Financial Economics, 1998, No.49 , 283-306
20. Fama E.F, "Random Walk In Stock Market Prices", Financial Analyst Journal, 1965
21. Fama E.F, "The Behavior Of Stock Market Prices; A Review Of Empirical Work", Journal Of Business, 1965, No.38, 34-105
22. Floros C, "The Monthly And Trading Month Effect In Greek Stock Market Return;1996-2002", Managerial Finance, 2008, Vol.34, No.7, 453-464
23. Harris L, "A Day-End Transaction Price Anomaly", Journal Of Financial And Quantitative Analysis, 1989, No.24, 29-45.
24. Holden K, Thomson J and Yungrit Y, "The Asian Crisis And Calendar Effects On Stock Return In THAILAND", European Journal Of Operational Research 163, 2005, 242-252
25. Islami Bidgoli GH, Nabizadeh A, "Weekend Effect And Compare The Behavior Of Institutional Investors And Real Investors In Tehran Stock Exchange Between The Years 2002-2006", Journal Of Financial Investigations, 2009, No.28
26. Johoson J, Cheng S, 'The Impact Of Holiday On The Trading And Return Pattern Of Australian Share Price Index Futures", Derivatives Use, Trading and Regulation 6, 1999, 363-374
27. Jones T, Ligon J, 'The Day Of The Week Effect In IPO Initial Returns", The Quarterly Review Of Economics And Finance, 2008
28. Kim C, Park J, 'Holiday Effect And Stock Returns: Further Evidence", Journal Of Financial And Quantitative Analysis, 1994, No.29, 145-157
29. Lakonishok J, Smidt S, "Are Seasonal Anomalies Real? A Ninety-Year Perspective", Review Of Financial Studies, 1988, No. 1, 403-425.
30. Marshall B, Visaltanachoti N, "*The Other January Effect: Evidence Against Market Efficiency?*", Journal Of Banking & Finance , 2010, Article Under Press By ELSEVIER
31. Meneu V, Pardo A, 'Pre-Holiday Effect, Large Trades And Small Investor Behavior", Journal Of Empirical Finance, 2004, No.11, 231-246
32. Raaei R, Bajelan S, "Identifying And Modeling Calendar Effects In Tehran Stock Exchange Using Arch And GARCH Model", Journal Of Economic Research, 2008, No.4
33. Raaei R, Shirzadi S, "Pattern Of Seasonal Changes In The Tehran Stock Exchange", Journal Of Economic , 2008, No.31

34. Raj M, Kumari D, 'Day-Of-The Week And Other Market Anomalies In The Indian Stock Market", International Journal Of Emerging Markets, 2006, Vol.1, No.3, 235-245

35. Ritter J, 'The Buying And Selling Behavior Of Individual Investors At The Turn Of The Year", Journal Of Finance, 1987, No.43, 701-717

36. Ritter J.R, "Behavioral Finance", Pacific-Basin Finance Journal , 2003, Vol.11, 429-437

37. Schwert G, 'Anomaly And Market Efficiency", Handbook Of The Economics Of Finance, University of Rochester, NBER, 2003, Chapter 15, 937-972

38. Schwert W.G, "Anomalies And Market Efficiency", Handbook Of The Economic Finance, Vol.1, 939-974.

39. Sheiler R, "From Efficient Market To Behavioral Finance", Journal Of Economic Prospective, 2003, No.17, issue.1 ,83-105

40. Shleifer A, Vishny R, "The Limits Of Arbitrage", Journal Of Finance, 1997, No. 52, 35-55

41. Sias R, Starks L, 'Institutions And Individuals At The Turn-Of-The-Year", Journal Of Finance, 1997, No.52, 1543-1562

42. Steeley J, "A Note On Information Seasonality And The Disappearance Of The Weekend Effect In The UK Stock Market", Journal Of Banking And Finance, 1999, No.25, 1941-1956

43. Stiversa C, Sunb L and Sun Y, '*The Other January Effect: International, Style, And Sub Period Evidence*", Journal Of Financial Markets, 2009, Vol.12, 521–546

44. Sun Q, Tong W, "*Risk And The January Effect*", Journal Of Banking & Finance, 2010, Vol. 34, 965–974

45. Thalrr R.H , "The end of behavioral finance", Financial Analyst Journal, No.55, issue.6 , 12-17

46. Tversky A, Kahnman D, "Judgment under uncertainty, heuristics and biases", Science 4157, 1974, 1124-1131

47. Venezia I, Shapira Z, "On the behavioral differences between professional and amateur investors after weekend", Journal Of Banking And Finance, 2007, Vol.31, 1417-1426