

Calendar Effects in the Palestine Securities Exchange (PSE): Analysis & Investigation

Nour Abu-Rub* and Tawfeeq Sharba**

This study aimed to verify the impact of national, religious and weekend holidays effect on the trading prices of stocks of companies listed on the Palestine Securities Exchange. The financial statements for the period 1/1/2006 until 1/1/2010 were analyzed. In order to test hypotheses of the study, the researchers used unilateral analysis of variance (ANOVA) and Sheve for a posteriori comparisons (Post Hoc ANOVA) which had shown a positive effect for the day prior holiday on the prices of shares of companies, but without statistical significance. The study found to have statistically significant differences in the stock returns of sampled companies due to the variable of the economic sector, to which these companies belong. The study also found that prices were trading higher on days prior to religious holidays than in the national and weekend holidays.

Keywords: Stock returns, volatility, anomalies, day-of-the-week effect, PSE. Holiday effect

1. Introduction

Investigating the presence of anomalies on prices of securities has become an active field of research in the financial markets, in which empirical finance has received considerable attention from academic journals. Some of these anomalies are broadly known as: seasonal anomalies or calendar effects. Among the most well known calendar effects in equity returns are the days of the week effect (usually called the weekend effect), the monthly or January effect, the trading month effect and the holiday effect. Either the presence or absence of such anomalies in returns of common stocks constitutes challenging the appropriateness of the Capital Asset Pricing model (CAPM) and the whole theory of market efficiency. Since its presence in stock markets generally indicates predictability of returns, these phenomena have been regarded as strong evidence against efficient market hypothesis in financial economics, and have left various effects on the efficient capital markets theory.

However, the efficiency of financial markets is considered one of the important concepts in terms of understanding how well these markets are operated. The terminology of market efficiency is used in financial literature to clarify and illustrate the relation between available information and stock prices in capital markets. As being an emerging market, the efficiency of the PSE is supposed to be of high importance due to the

*Dr. Nour Abu-Rub, Faculty of Administrative & Financial Science, Arab American University – Jenin, Palestine, Email: naburub@aaui.edu,

**Dr. Tawfeeq Sharba, Faculty of Administrative & Financial Science, Arab American University – Jenin, Palestine, Email: Tabusharbeh@aaui.edu,

Abu-Rub & Sharba

accelerated inflows of investment funds in it as a result of both regulation reforms and alleviating investment obstacles of international equity investments in the Palestinian market.

Prices in the PSE have witnessed sequential and unjustified upward and downward fluctuations (Abdelkareem, 2007). The study of Abu-Sharbeh (2009) clarifies that a shortage of information efficiency may be beyond this phenomenon. Therefore, this study is an endeavor to answer if this phenomenon can be partially illustrated through the analysis of holiday effects on stock prices in the PSE, and how this phenomenon may carry on or not in a meaningful way in the future.

The main purpose of this study is to analyze and investigate the presence and the absence of holiday effect phenomenon on investment returns for Palestine Securities Exchange (PSE) as a case of emerging financial markets. This study contributes to the existing literature in several aspects. , it analyses the market anomalies and their effects on the PSE, in which the study has not been done in Palestine, and rarely done in emerging markets. Previous studies have extensively examined calendar effects on stock prices generally, but this study focuses on the type of the holidays and how stock prices may be influenced by each. As well, this study clarifies the impact of such calendar effects on various Palestinian economic sectors. On the other hand, the findings of this study may be also valuable to the PSE's investors, in which they may benefit from shedding light on opened opportunities due to abnormal returns. The results of this study and others alike, may have important insights and implications into market participants, regulated bodies and policy makers in Palestine. The relevance of these implications lay on the direct bearing of their consequences to the timing and nature of investment decisions to be made.

The study is subject to the following limitations:

Firstly, it is applied in Palestine, in which a small emerging economy and few listed companies in the market are analyzed. Therefore, its results cannot be generalized to larger companies or to a more developed economy. Secondly, the study focused on one type of calendar effects, namely holiday effects. Hence, it is hard to generalize its findings to other calendar effects.

The paper is structured in the following way: section two is literature review; section three describes the methodology, while section four sets out the results of the empirical analysis. Finally, section five reports the conclusions and recommendations.

2. Literature Review

The body of literature comprises many studies analyzing the anomalies of stock returns in developed markets, but few studies have investigated whether such phenomena prevail in emerging markets such that of Palestine. This is potentially important because the global integration of financial markets make investment opportunities accessible worldwide. Therefore, substantial changes in volatility of stock markets' returns may have significant negative effects on risk-averse investors. As volatility of stock returns

Abu-Rub & Sharba

quantifies the risk of the stock market, an understanding of volatilities due to calendars is becoming more important for determining the cost of capital and for assessing investment and leverage decisions.

There is a group of other studies that look at the day of the week effect from another perspective in which it is considered as an independent anomaly titled "Holiday Effect". The holiday effect refers to the observation that the average stock return is higher on the trading day immediately preceding holidays than on other trading days. Ariel (1990) examined daily returns on the CRSP equally-weighted and value-weighted indices of NYSE and AMEX stocks from 1963-82 and found that the average return on pre-holidays is significantly higher than the remaining trading days. Similar results are reported by Pettengill (1989) and Kim and Park (1994) who independently analyzed the US stock market over different periods of time.

Cadsby and Ratner (1992) found that the holiday effects are significant in Australia, Canada, Hong Kong, Japan and US but not in France, Italy, Switzerland, UK and West Germany. They also found that, with the exception of Hong Kong, the countries exhibiting holiday effects do so before their own local holidays.

In the Singapore market, Wong and Ho (1986) documented a weekly seasonal pattern of stock returns over the period 1975-1984. Subsequent studies by Condoyanni et al (1987), Aggarwal and Rivoli (1989), Wong et al (1992) and Chan et al (1996) provided further evidence of the day-of-the-week effect in the Singapore market. On the other hand, Tan and Wong (1996) showed that stock returns are significantly higher on pre-holidays than on other trading days in the period 1975-94 using the SES All Singapore Index. However, Wong, Agarwal and Wong (2006) had investigated the calendar anomalies in the Singapore stock market over the recent period from 1993-2005. Specifically, changes in stock index returns were examined surrounding January (the January effect), on different days of the week (the day-of-the-week effect), around the turn of the month (the turn-of-the-month effect) and before holidays (the pre-holiday effect). The findings revealed that these anomalies had largely disappeared from the Singapore stock market in recent years. The disappearance of these anomalies has important implications for the efficient market hypothesis and the trading behavior of investors.

In Arab financial markets, few studies had investigated the day of the week anomaly. Among these, the study of Kamaly & Tooma (2009) which investigated the day-of-the-week effect in 12 major Arab stock markets using Arab Monetary Fund (AMF) daily index returns from May 2002 to December 2005. The study adopted an estimation strategy utilizing Autoregressive (AR) and Generalized Autoregressive Conditional Heteroscedastic (GARCH)-type specifications to allow for a time-varying variance. The finding revealed that one-third of these markets exhibit significant day-of-the-week effect in returns and two-third of these markets exhibit significant day-of-the-week effect on volatility. In addition, most of these day-of-the-week effects were focused within the beginning and the end of the trading week. As well, the existence of a significant risk premium was confirmed in five of the 12 studied markets.

Abu-Rub & Sharba

On the other hand, study of Zarour (2007) examines the existence of the Halloween effect on some Arab countries equity markets. The data set used in this study constitutes of daily stock prices of 9 Arab equity markets in the Middle East region. It uses regression analysis with dummy variables to test for the existence of the Halloween effect in some Arabian equity markets. The findings of the study reveal a highly significant Halloween effect documented for 7 out of 9 Arabic equity markets in the Middle East region even after adjustments have been made for January effect.

Study of Aly, Mehdian and Perry (2004) had investigated daily stock market anomalies in the Egyptian stock market using its major stock index, the Capital Market Authority Index (CMA), to shed some light on the degree of market efficiency in an emerging capital market with a four-day trading week. The results indicated that Monday returns in the Egyptian stock market were positive and significant on average, but were not significantly different from returns of the rest of the week. Thus, no evidence was uncovered to support any daily seasonal patterns in the Egyptian stock market, indicating that stock market returns were consistent with the weak form of market efficiency. The study indicated that its results should be interpreted with caution since the Egyptian stock market has only a limited number of stocks that are actively traded.

Al-Rjoub, (2004) had examined the robustness of evidence on the weekend anomaly in stock return data after counting for the impact of possible measurement errors and sample sizes. The sample used the alternative hypothesis of unequal returns across days of the week. The Start-of-the-week day's returns were consistently insignificantly negative across different time frames. The Average returns for the day right after the beginning of the working week was consistently significantly negative. After controlling the change of the working week to start on Sunday's; results had shown that Thursday return (the end of the week) tend to be positive and the highest while Sunday return was less in most of the cases (negative and the worst). Possible explanations provided by the study for the high positive significant Thursday return was the possible settlement practices, which imply unusually high closing on Thursdays and consequently lower closing on Sundays. Professional market watchers who were aware of the daily return pattern should adjust the timing of their buying and selling to take advantage of the effect. The new logical implication of the study was "Don't Sell Stocks on the Second Day of the Week".

Al-Saad, (2005) had investigated the existence of the holiday effect on stock returns in the Kuwait Stock Exchange (KSE), using the market index for two periods: pre-invasion (1984-1990) and post-liberation (1993-2000). The results obtained indicate the non-existence of the holiday effect in the KSE in which it was not consistent with the results obtained in the developed and some emerging markets. Testing the differences between the two periods indicated the existence of significant higher stock returns in the post-liberation period. Tests also indicated the existence of significant higher returns for the post-holidays in the post-liberation period.

Al-Khazali, (2008) aimed to examine the impact of weak trading on the day-of-the-week effect in the emerging equity markets of the United Arab Emirates (UAE). It applied a stochastic dominance approach to detect the day-of-the-week effect. The findings

Abu-Rub & Sharba

indicated that there is day-of-the-week effect in published daily prices, while daily effect disappeared when data were corrected to remove any measurement bias arising from weak trading. The stochastic dominance results had shown that the day-of-the-week effect in the UAE equity markets was not present when corrected raw data or thin and infrequent trading.

On Muslim financial markets in the Middle East region and elsewhere, there are a range of studies which investigate the phenomena of anomalies from different aspects. Study of Al-Ississ (2009) examines the effect of religious experience during the Muslim holy days of Ramadan and Ashoura on the daily returns of 17 Muslim financial markets. It documents statistically significant changes in daily stock returns associated with religious experiences on these holy days. The findings of the study reveal that this effect is not unidirectional as the most sacred days in Ramadan yield a positive impact on daily returns while Ashoura is associated with negative effect. As well, Ramadan's more sacred days are associated with the effect culminating on the most sacred day, Ramadan 27th. Similar study is undertaken by Yavuz (2008), in which examines the month and trade deficit (the feast of Ramadan and the feast of Sacrifice) effects on the volatility of trade deficit of the Turkish economy by using conditional framework. The study estimates three separate models including dummy variables in both conditional mean and variance equations. The estimation results reveal that the Holy day's effect is significant in the mean equation and that trade deficit occurs mostly in December and least in January. The volatility content of trade deficit is found at maximum in December, whereas it is at minimum in September.

From another perspective, the study of Goh and Kok (2006) seeks to examine the intraday seasonality and volatility of stock process on Malaysian stock market by exploiting historical prices in forecasting the 10 – minute- ahead composite index in the market. The findings of the study point out that a simple model incorporating intraday seasonality can have lower forecast errors than a random walk. As well, improved accuracy is achieved when time – varying volatility is included in the time of the day seasonal model for both in-sample and out-samples forecasts. In addition, the updating of parameter estimates these volatility models at each new forecast origin to incorporate the latest available information leads to further improvements in forecasting performance.

On the European Financial Markets, study of Chukwuogor-Ndu (2006) aims to examine the financial markets trends such as the annual returns, daily returns and volatility of returns in 15 emerging and developed European financial markets. It uses a set of parametric and nonparametric tests to check the equality of mean returns and standard deviations of the returns. The findings of the study reveal that in spite of positive annual index closing price changes were the norm between 1997 and 2004, many of the European indexes experienced negative changes especially in 1998 and 2002. Also, seven of the European financial markets experienced negative returns on Monday and seven others also experience negative returns on Wednesday. The study indicates that there was generally high volatility of returns in the European markets.

Abu-Rub & Sharba

But the Study of Caro (2006) seeks to investigate investment opportunities that may arise from abnormal behavior of the day of the week effect that may exist on the major European stock markets. It analyzes the day of the week effect on these markets by means of GARCH and T – ARCH models. The findings of the study indicate that abnormal behavior is not present in the returns of these stock markets. In addition, evidence is obtained of the day of the week effect in the volatility of major European stock markets, using symmetric and asymmetric models.

Another study done in Greece, a member of European Union, is the study of Kenourgios and Samitas (2008). This study investigates the day of the week effect on return and volatility for major Athens Stock Exchange (ASE) indexes. It uses conditional variance framework which extends previous work on the Greek stock market. The findings of the study indicate that the day of the week affect both the return and volatility equations is present for the emerging ASE over the period 1995 – 2000. It points out that this market anomaly seems to loose its strength and significance after the Greek entry to the Euro-Zone and the market upgrade to the developed ones through the period 2001 – 2005. The study suggests that this is a consequence of the competitive transformation and institutional reforms introduced in the ASE.

On the international level, there are many studies that are done in different markets. Samples of theses studies include the study of Stephen and Etebari (2007). This study aims to examine monthly stock returns for a long run five international markets. The results suggest two powerful monthly anomalies occurring in January and September. Investing in the CRSP equal-weighted index in only January turns \$1 in 1926 to \$87.40 by 2006, the second closet month is July, during which \$1 grows to \$3.11, no such anomaly occurs when using the CRSP value-weighted index indicating the January effect is due to small firm performance. September is a poor month to invest. The same \$1 invested in September decreases to a mere \$0.43 if invested in the value-weighted CRSP index or \$0.49 if invested in the equal-weighted CRSP index. It is found also that the Halloween effect is attributable to abnormally high January returns and abnormally low September and October returns. As well, the September effect is established in four of the five international markets tested.

The significance of calendar effects has been also investigated in international markets. The study of Hansen and Lunde (2003) is one pattern of theses studies. The objective of this study is to contribute the discussion of calendar effects and their significance. It derives a test for calendar specific anomalies which controls for the full space of possible calendar effects, in which this test achieves good power properties by exploiting a particular correlation structure since its advantage is that it is capable of producing data-mining robust significance. The study applies the test to stock indices from Denmark, France, Hong Kong, Italy, Japan, Norway, Sweden, UK, and the USA. The findings of the study reveal that calendar effects are significant in most series and it is primarily end of the year effects that exhibit large anomalies. Findings indicate also that in recent years it seems that the calendar effects have diminished except in small cap stock indices.

Abu-Rub & Sharba

On African Stock Markets, study of Alagidede (2008) investigates the month of the year and the pre-holiday effects and their implications for stock market efficiency in African stock markets. It uses OLS regression and examines both the mean and conditional variance. The study finds high and significant returns in days preceding a public holiday for South Africa, but this finding is not applicable to the other stock markets included in the sample of the study. The results of the study indicate also that the month of the year effect is prevalent in African stock returns.

In New Zealand, the study of Cao et al (2009) documents the pre-holiday effect by using a sample spanning four decades; one of the most common of the calendar effect anomalies, still exists on the New Zealand market. The effect appears in the study to have increased over time. The study finds that this effect is inversely related to firm size with the entire effect limited only to small firms, with no pre-holiday price patterns being observed for medium to large firms. The existence of this pre-holiday effect seems to be mainly driven by factors relevant to New Zealand. Also, the study finds that a search for possible reasons for the persistence of the effect points primarily towards the illiquidity of smaller stocks and the reluctance of small investors to buy prior to major market closures.

Still in Indian Market, the study of Singhal and Bahure (2009) examines weekend effect of stock returns. It argues that the measured daily returns should depend on the day of the week by taking the context of the Indian stock market. It believes that the expected returns on Monday should be lower and returns on Friday should be higher than other days by evidencing the existence of the weekend effect. The study offers a partial explanation to this anomalous behavior by considering a model for adjusted stock returns based on the delay between the trading and settlement period, complex effects of holidays on daily returns and effect of investor expectations.

Finally, calendar effects are examined in the Chinese Stock Market by several studies. Among them are the following. Study of Rezvanian and Mehdian (2008) aims to analyze the calendar anomalies in Chinese equity markets using indices from six Chinese exchanges. The empirical findings of the study reveal that Monday and the day of the week effects demonstrate no tradition Monday effect in six of the Chinese stock indices during the periods of the study. Additionally, the across days of the week correlation analysis reveal no predictable daily returns patterns and no significant correlation across the days of the week.

The analysis of January and the month effects provide no or little evidence of such effects in Chinese equity markets. As well, the results of correlation analysis across the months of the year suggest that there is not statistically significant returns correlation among months of the year and no predictable returns patterns. The study concludes that the absence of Monday, the days of the week, January effects, and the months of the year effects indicates that the Chinese equity markets are to certain level efficient in spite of the assumption that Chinese equity markets is not developed and might demonstrate signs of inefficiencies.

Abu-Rub & Sharba

Meanwhile, the study of Ma (2007) aims to analyze broad samples of equal-weighted and value-weighted returns of the Chinese security markets. It documents those abnormally high rates of return on small-capitalization stocks are to be observed during the month of March on both A-shares markets. The study finds that contrary to the international experience of the January effect, the March effect can be seen as the turn of the year effect in the Chinese security market as the national economic background and cultural background delay the turn of the year from February to March.

On the other hand the study of Gao and Kling (2005) examines monthly and daily effects in Chinese stock market. The findings of the study reveal that there is a change of the calendar effect when using individual stock returns. In Shanghai and Shenzhen, it is found that the year end was strong in 1991, but disappeared later. As well, the highest returns can be achieved in March and April, since the Chinese year end is in February. As for daily effect, the study finds that Fridays are profitable. Additionally, it is found that business funds are used for short term speculations before they are paid back prior to weekends, because Chinese investors are often embezzles business fund for private trading.

However, the above studies that are documented in the literature review section converge and diverge with our study in various aspects but none of them could explain the problem of this study but they constitute basis to derive study hypotheses. Therefore, these convergence and divergence are reflected in the study hypotheses listed below.

3. Methodology

3.1 Sample & Data

The sample of the study includes the entire population, in which the 32 shareholding companies listed in the PSE on the date of the study are subject to the study analysis. The reason behind that is the PSE is an emerging, small, and illiquid market and no otherwise sample can represent it truly and faithfully. The sampled companies have been classified into the following four economic sectors: industry, service, banking and investment sectors.

In order to formulate the study tool, the researchers supported by the information division of the PSE, have reviewed the records and historical data from 1/1/2006 through 1/1/2010 and constructed stock prices pre and post holidays. For the study purposes, it has been depended on the formal holidays declared by the Palestinian Primary Council in which adopted by the PSE. These holidays are as the following:

Religious holidays: Israa and mi'raj, fetter, adha, Christmas, ghattaseen and hijiri year holidays. Non-religious holidays: Independence Day, Labor Day and The New Calendar Year's Day. Weekends: Fridays and Saturdays.

Abu-Rub & Sharba

3.2 Hypotheses

According to both the analysis of previous studies and the objectives of the study, the following hypotheses are driven:

- 3.2.1 There is no statistical inference at the level of indication ($\alpha = 0.05$) on trading stock price of listed companies in the (PSE) attributed to the variable of religious and national holidays.
- 3.2.2 There is no statistical inference at the level of indication ($\alpha = 0.05$) on trading stock price of listed companies in the (PSE) attributed to the variable of weekend holidays.
- 3.2.3 There is no impact that has a statistical inference at the level of indication ($\alpha = 0.05$) on trading price attributed to the variables each of religious, non religious and weekend holidays.
- 3.2.4 "There is no differences with statistical inference at the level of indication ($\alpha = 0.05$) have an impact on trading price attributed to the variables of each of service, industry, investment and banking sectors.

3.3 Statistical Techniques

Statistical techniques used in this study are mainly depending on the Statistical Packages of Social Sciences (SPSS). The study uses unilateral analysis of variance (ANOVA) and Sheve for a posteriori comparisons (Post Hoc ANOVA) to test its hypotheses that are listed below

The researchers have used an analytical descriptive approach, since the study relies on the records of listed companies in the Palestine Securities Exchange (PSE). Based on the PSE's records of pre and post holidays, t-test paired of the Statistical Packages of Social Sciences (SPSS) has been used. The following are the formulas that have been used for the hypothesis and analysis:

H0: Holidays in Palestine have no impact on stock prices.

$$H_0 = \mu_d = 0$$

H1: Holidays in Palestine have an impact on stock prices.

$$H_1 = \mu_d \neq 0$$

Since μ_d represents the average stock price pre and post holiday. The null hypotheses should be rejected if statistical function (significance) less than (0.05) or when calculated t compared with tabulated t in the following formula:

$$T = \bar{d} - \mu_d / (sd / n)$$

Since $\mu_d = 0$ and $d_i/n = \bar{d}$

d_i represents the difference between pre holidays and post holidays.

n represents the number of holidays.

sd = standard deviation.

4. Findings of the Study

4.1 Results of the First Hypothesis

Table 1: Means, standard deviation and t-test for the variable of Religious and national holidays

Scope	Before (128)		After (128)		Degree of freedom	t	Indication level
	Mean	sd	Mean	sd			
trading	322.46	84.44	320.69	83.54	64	0.085	0.932
* significance level ($\alpha = 0.05$)							

The above table shows that differences are not statistical functions in stock price pre and post holiday. It is observed that trading price pre holiday has a mean of (322.46) in which is higher than the mean post holiday that amounted (320.69). This result is in agreement with some of previous studies such as (Aintablian & Shamseddine, 2006) that investigate the impact of holidays on the performance of stock exchanges in Jordan and Egypt. Both findings confirm the results of psychologist studies that conclude positive public mood in the day pre holiday.

Based on the result shown in the table above, the hypothesis states that " there is no statistical inference at the level of indication ($\alpha = 0.05$) on trading stock price of listed companies in the (PSE) attributed to the variable of religious and national holidays" is accepted.

4.2 Results of the Second Hypothesis

Table 2: Means, standard deviation and t-test for the variable of weeken holidays.

Scope	Before (716)		After (716)		Degree of freedom	t	Indication level
	Mean	sd	Mean	sd			
Trading	305.70	59.51	304.83	58.28	356	0.140	0.889

The above table shows that differences are not statistical functions in stock price pre and post holiday. In other words, there is no statistical inference in trading price whether pre week end holiday or post weekend holiday. It is observed that trading price pre weekend holiday has a mean of (305.70) in which is higher than the mean post weekend holiday that amounted (304.83). The researchers believe that these results are due to the investors' optimistic pre weekend and their anticipation of market improvement post weekend holiday. In addition to information flows during the weekend holiday.

This result conform findings of some previous studies such as (Mayer & Hansen, 1995) around the judgment of happy and optimistic people, as well as the study of (Nath & Dalvi, 2004).

Abu-Rub & Sharba

Based on the result shown in the table above, hypothesis states that " there is no statistical inference at the level of indication ($\alpha=0.05$) on trading stock price of listed companies in the (PSE) attributed to the variable of weekend holidays" is accepted

4.3 Results of the Third Hypothesis

Table 3: Result the analysis of one way ANOVA For the individual differences according to holiday variables.

Scope	Variance source	Total Squares	Degree of freedom	Mean squares	f	Level of indication
trading	Between groups	26073.714	2	13036.857	3.363	*0.036
	Within groups	1531309.080	395	3876.732		
	Total	1557382.793	397			

- Significance level ($\alpha = 0.05$)

Table (3) show that differences are significant, the level of significance is 0.036 and less than 0.05, it's meaning that there is statistical difference in stock price pre and post holiday. Thus, we reject the hypothesis states that " there is no impact that has a statistical inference at the level of indication ($\alpha = 0.05$) on trading price attributed to each variables of religious, non religious and weekend holidays".

In order significant differences, the study uses Sheffe test (Least Significant Difference – LSD) according to holiday variable. The result of LSD test is listed in table (4) below:

Table 4: Result of LSD test according to holiday variable

Holidays	Religious	Non-religious	Weekend
Religious	-	21.84	24.49*
Non-religious		-	2.65
Weekend			-

The above table shows the following:

- There is a difference in trading between religious holidays and weekend holidays in the interest of the religious holidays. Since the mean for weekend is less than the mean of religious holidays by (24.49).
- There are no differences in trading between religious and non religious holidays.
- There are no differences in trading between weekend holidays and non religious holidays.

Abu-Rub & Sharba

The researchers believe that reasons beyond that are referred to good moods before religious holidays, and investors' optimism of market prospects after holidays especially if we know that the number of days in religious holidays exceeds the number of days in other types of holidays. And this good mood after holidays affect stock prices in financial markets, a result conform with the findings of (Lucy & Dowling, 2005) that confirm the investor' perception affect pricing of equity instruments.

4.4 Results of the fourth hypothesis

This hypothesis states that " there is no differences with statistical inference at the level of indication ($\alpha = 0.05$) have an impact on trading price attributed to the variables of each of service, industry, investment and banking sectors. The results of the statistical analysis show that there is no significance on the trading price on the economic sectors, despite the existence of minimum difference in the trading price pre religious holidays compared to other holidays except for the trading price in the banking sector where the trading prices were higher pre weekends, this come from the fact that the investors tend not buy the banks shares due to their religious beliefs.

5. Summary and Conclusion

A common generalization of specific findings of this study can be concluded as the following. Higher stock prices on the day pre holidays compared with low stock prices on the day post holidays. A combination of some factors can illustrate this phenomenon in financial markets in general and in the PSE in particular. Forthcoming holidays often unify their attitudes in which more convergence in their attitudes toward happiness. One day before a holiday, investors share common positive feelings, mood and emotions that lead them to an optimistic judgment. Thus positive judgment activates trading dealings to buy and sell and the result rises of stock prices. Unlike other holidays, investor's attitudes are divergence in which diversification of trading is the case prevail in financial markets. During the holidays, investors suffer due to lack of information. Day after holidays, the investors are less informed and their dealings are characterized by conservatism which in part can lead to pessimistic mood and thus awareness in trading process make inactive dealings. The result is declining of stock prices. This illustration may be a part of psychological financial markets such as heard theory and asymmetry information problem. The PSE is an emerging financial market that operates under the weak form of efficiency. Information sources departure to some extent from information included in the formal financial reports that should be prepared according to a specific GAAP, namely the international GAAP in the case of Palestine. However, these findings indicate the study problem cannot fully illustrated by the calendar effects in the PSE, but they may contribute as a secondary factor beside the major factors of the problem. Therefore, future studies still needed to explore the entire reasons that may lay behind it.

On the other hand, to the knowledge of researchers, no other study had investigated the calendar effects in general and the holiday effects in particular in Palestine. Hence, it is hoped that this study would open this line of research in Palestine. Meanwhile, the study is hoped also to fill the gap in the finance literature pertaining to calendar effects, by

Abu-Rub & Sharba

concentrating the arguments around calendar effects on economic sectors individually, in which this matter did not investigated by previous studies.

Study Recommendations

Base on the study findings, the researchers recommend the following:

- 5.1 Taking more care in communicating information to investors during holidays with minimum cost.
- 5.2 Motivate both board of directors and general executives of listed companies to increase their care about the factors that have interest and impact on stock prices including the mood of investors in particular pre holidays.
- 5.3 Mandate shareholding companies to comply with disclosure required by International Financial Reporting Standards sine they are formally adopted in Palestine since 2005.
- 5.4 Place more interest on trading day's pre and post holidays.

References

- Abdelkarim, N 2007, 'Evaluation the application's endeavors of listing and disclosure systems in Palestine Securities Exchange' , *Working paper presented to the First Annual Palestinian Capital Market Forum*, Ramallah (Sep.8-9, 2007), Palestine. (In Arabic).
- Abu-sharbeh, T 2009, ' Assessment of Financial Reporting and Disclosure Practices of Palestine Securities Exchange's listed companies in the light of Local Legal Requirements' , International Accounting Standards and Investors Expectations, Unpublished PhD Thesis, ,Amman Arab University for Graduate Studies, Amman, Jordan, (In Arabic).
- Agarwal, R & Rivoli, P 1989, 'Seasonal and Day-of-the-Week Effects in Four Emerging Stock Markets' , *Financial Review*, 24, 541-50.
- Alagidede, P, 2008, 'Month of the year and pre-holiday seasonality in African Stock Markets, ' Stirling Economics Discussion Paper 2008-23, November 2008, University of Stirling. Online at <http://economics.stir.ac.uk>
- Al-Ississ, M 2009. The Impact of Religious Experience on Financial Markets. Harvard Kennedy School of Government, Harvard University.
- Al-Khazali, O 2008, 'The impact of thin trading on day-of-the-week effect: Evidence from the United Arab Emirates' , *Review of Accounting and Finance*. Vol.7. issue 3: 270 – 284.
- Al-Rjoub, S 2004, "The Daily Return Pattern in the Amman Stock Exchange and the Weekend Effect." *Journal of economics corporation*, 25, 1 (2004): 99 – 114.
- Al-Saad, K 2005, "The holiday effect and stock return in the Kuwait Stock Exchange." *Global Competitiveness*, Saturday, January 1 2005.
- Ariel, R 1990."High Stock Returns before Holidays: Existence and Evidence on Possible Causes." *Journal of Finance*, 45, 16: 11-26.
- Cadsby, C.and Ratner, M 1992, "Turn-of-Month and Pre-Holiday Effects on Stock Returns: Some International Evidence." *Journal of Banking and Finance*, 16, 497-509.

Abu-Rub & Sharba

- Cao, X, Permachandra, I, Bhabra, G and Tang, Y 2009, Firm Size and the Pre-Holiday Effect in New Zealand. *International Journal of Finance and Economics*, ISSN 1450 – 2887 Issue 32 (2009).
- Caro, A 2006, Day of the Week Effect on European Stock Markets. *International Journal of Finance and Economics*, ISSN 1450 – 2887 Issue 2 (2006).
- Chan M, Khanthavit A and Hugh T 1996, "Seasonality and Cultural Influences on Four Asian Stock Markets." *Asia Pacific Journal of Management*, 13, 1-24.
- Condoyanni L, Hanlon O and Ward C 1987, "Day of the Week Effects on Stock Returns: International Evidence." *Journal of Business Finance and Accounting*, 14, 159-74.
- Chukwuogor-Ndu C 2006, Stock Market Returns Analysis, Day of the Week Effect, Volatility of Returns: Evidence from European Financial Markets 1997 – 2004. *International Journal of Finance and Economics*, ISSN 1450 – 2887 Issue 1 (2006).
- Hansen R and Lunde A 2003, Testing the Significance of Calendar Effects. Centre for Analytical Finance, working paper series No. 143, University of AARHUS.
- Gao L and Kling G 2005, Calendar Effects in Chinese Stock Market. *Annals of Economics and Finance*, 6, 75-88 (2005), Pecking University Press.
- Goh K and Kok K 2006, Beating the Random Walk: Intraday Seasonality and Volatility in Developing Stock Market. *International Journal of Business and Economics*, 2006, Vol. 5, No. 1, 41 – 59.
- Kamaly A & Tooma E 2009, "Calendar anomalies and stock market volatility in selected Arab stock exchanges." *Applied Financial Economics*, Volume 19, Issue 11 June 2009 , pages 881 – 892.
- Kenourgios D and Samitas A 2008, The Day of the Week Effect Patterns on Stock Market Return and Volatility: Evidence for the Athens Stock Exchange. *International Journal of Finance and Economics*, ISSN 1450 – 2887 Issue 15 (2008).
- Kim C and Park J 1994, "Holiday Effects and Stock Returns: Further Evidence." *Journal of Financial and Quantitative Analysis*, 29, 145-157.
- Lee M and Hung J 2008, The Day of the Week Effect on the Shape of the Heavy – Tailed Distribution. *International Journal of Finance and Economics*, ISSN 1450 – 2887 Issue 21 (2008).
- Ma J 2007, "Financial Anomalies: Evidence from Chinese Stock Markets", Master dissertation submitted to Auckland University of Technology. Available at [www.http://aut.researchgateway.ac.nz](http://aut.researchgateway.ac.nz)
- Mehdian A and Perry S 2004, "An Analysis of Day-of-the-Week Effects in the Egyptian Stock Market." *International Journal of Business*, Vol. 9, No. 3, 2004
- Pettengill G 1989, "Holiday Closings and Security Returns." *Journal of Financial Research*, 12, 57-67.
- Rezvanian R, Turk R and Mehdian S 2008, Anomalous Behavior in Security Markets: Evidence from Equity Markets of the People's Republic of China. Available at www.apeaweb.org/confer
- Singhal A and Bahure V 2009, Weekend Effect on Stock Returns in the Indian Market. *Indian Institute of Technology, Kharagpur, Great Lakes Herlad*, Vol. 3, No. 1, March 2009.
- Stephen J & Etebari A 2007, "A Month by Month Examination of Long-Term Stock Returns", *Proceeding of the Northeast Business and Economics Association Conference*, University of New Hampshire, UK.

Abu-Rub & Sharba

- Tan R and Wong N 1996, "Calendar Anomalies in the Singapore Stock Market. Singapore Journal of Stock Exchange." June, 6-13.
- Wong K and Ho H 1986, "The Weekend Effect on Stock Returns in Singapore". Hong Kong Journal of Business Management, 4, 31-50.
- Wong K, Kui T and Chan C 1992, "Day-of-the-Week Effects: Evidence from Developing Stock Markets." Applied Financial Economics, 2, 49-56.
- Wong W, Agarwal A and Wong N 2006, "The Disappearing Calendar Anomalies in the Singapore Stock Market." The Lahore Journal of Economics, 11: 2 (Winter 2006), pp.123 – 139.
- Yavuz N 2008, The Month and Holy Days Effects on the Volatility of Trade Deficit: Evidence from Turkey. Journal of Economic and Social Research 10 (2) 2008, 67 – 84.
- Zarour B 2007, The Halloween Effect Anomaly: Evidence from Some Arab Countries Equity Markets. University of Patras, Greece. Studies in Business and Economics, Vol. 13, No.1
- Zoa'rob H 2005, "Testing the Operational efficiency of The Palestine Securities Exchange", *Research Paper presented to the First Scientific Meeting held in The Islamic University (April, 0 -9, 2005), Gaza, Palestine. (In Arabic).*