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THE DAY OF THE WEEK EFFECT OF STOCK RETURNS: EMPIRICAL EVIDENCE FROM FIVE SELECTED ARAB COUNTRIES

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Abstract

This study examines the presence of one of the prominent anomalies which is the day of the week effect anomaly in five of Arab stock exchanges which are (Qatar, Amman, Palestine, Egypt, and Bahrain stock exchanges) cover the period from May 2010 to April 2014. By using one-way analysis of variance (ANOVA) analysis and Post Hoc Tests, the study indicates that there is no existence of the day of the week effect in each of (Qatar, Amman, Egypt, and Bahrain stock exchange) while it is presence in Palestine stock exchange where the lowest return is in Sunday (the first trading day of the week) and the highest return is in Tuesday.

Keywords: Market Efficiency, Efficient Market Hypothesis, Anomalies Effect

1. Introduction

Market efficiency is one of the important concepts in finance that because of the increasing in the importance of the capital market efficiency in last decades. Several of studies have been conducted to examine the financial market efficiency, where the problem of financial (stock or equity) market efficiency captured the attention of many researchers whose published several articles related of market efficiency issue or what known as the efficient market hypothesis (EMH) (Borowski and Lukasik, 2015).

The efficient market hypothesis (EMH) claims that a market can be considered as an efficient if it interacts and responds accurately and quickly to all available information (Al-Jafari, 2012). Fama (1970, p.385) defines an efficient market as "a market in which prices always fully reflect available information", and he explored the efficient market hypothesis by three forms which are: weak form, semi-strong form and strong form. However, the efficient market hypothesis was conflicted by three groups of anomalies such as calendar anomalies or Seasonality, technical anomalies and fundamental anomalies (Srinivasan and Kalaivani, 2013). Calendar anomaly is the most critical topic in finance on which many studies have been made through the last three decades. Some of these anomalies which effect stock returns are day-of-the-week effect, weekly effect, weekend effect, month-of-the-year effect, holidays effect, Islamic occasions as Ramadan effect and January effect etc. (Haroon and Shah, 2013).

The mean objective of this article is to examine the day of the week effect on stock return in some developing countries, selected from Arab countries. The article will include five sections. Section 1 presents the introduction, Section 2 presents the theoretical framework and literature review, Section 3 discusses data and research methodology, Section 4 discusses data analysis and results and Section 5 offers findings and conclusions.

2. Theoretical Framework and Literature Review

2.1. Purpose of the Paper

The day of the week effect is one of the anomalies appearing in stock market which related with efficient market hypothesis, so this part of the article will explain the term of market efficiency and the phenomenon which related with it.

2.2. Definition of Efficient Market

A market which includes large number of rational investors who are willing to maximize their profit by trying to forecast future prices of stocks, where the information which could affect the stock prices are completely and freely available for all investors (Karacaer *et al.* 2010). Fama (1991, p.1575) define efficient market hypothesis as “security prices fully reflect all available information” that mean any investors can’t get abnormal return which is a high returns that can an investor achieved by a certain security or portfolio during a period of time which is different from the predicted rate of return -or forecasting the future stock prices according to past information, so as a result no one can beat the market for a long time, because stock prices quickly adapt in the market, many studies refer that abnormal returns in the stock market show a positive autocorrelation, in the short horizon and negative autocorrelation in the long horizon (Beker and Espino, 2013).

2.3. Efficient Market Hypothesis Forms

Fama (1970) divided market efficiency into three categories: weak form, semi-strong form, and strong form.

Weak form implies that the market is efficient; reflecting all available market information, assume that the rate of return on the market should be independent which mean the past rate of return has no effect on future return.

Semi-strong form implies that the market is efficient, reflecting all publically available information, assume that stock prices in the market adjust quickly to absorb new public information which means that no one of the investors can benefit over or above the market according to new information.

Strong form implies that the market is efficient; reflecting all available information whether private or public, assume that if any investor has a private information the market will reflect this information and the investor will not be able to earn abnormal return according to this information.

2.4. Anomalies in Efficient Market

Stock market anomalies are defined as abnormal pattern of stock returns that located in the stock markets. The efficient market hypothesis is conflicting with three groups of anomalies such as: calendar, fundamental and technical anomalies (Al-Jafari, 2012).

Calendar anomalies indicate to the tendency of securities which particularly behave differently on the day-of-the-week, week-of-the-month, month-of-the-year and others. Fundamental anomalies are related to the economic fundamentals of the equity; include value effect, small-cap effect and the low-volatility anomaly. Technical anomalies “related to the trading rules of the simple moving average and the exponential moving average” (Eriotis *et al.* 2006, p.87). Technical analysis is a way of predicting movement of the prices and the market trends in the future, by studying the market charts.

2.5. Day of the Week Effect

Day of the week effect is one of the calendar anomalies, many empirical studies refer to the existence of the day of the week effect on stock return, and claim that the first trading day of the week (Monday) has a negative effect which mean negative return, while the last trading day of

the week (Friday) has a positive effect which mean positive return. This result provided first by Kelly (1930) in his pioneer study which implemented on US stock market, where approved that the average rate of return on Monday less than in other days of the week (Borowski, 2015). This result may give investors a trading strategy to earn abnormal return by buying stocks in the first trading day and hold them until the last trading day. But in the same time many other empirical studies refer to inexistence of the day of the week effect on stock return.

3. Literature Review

Since the pioneering study of the day of the weak effect on stock return which conducted by Cross (1973) which indicated that the lowest mean return and the highest variance occur on Monday offering a small risk return relationship compared to those of other days of the week, many empirical studies tried to examine the day of the weak effect on stock return, and other anomalies evidence from developed and developing countries. This study will examine the day of the weak effect anomaly applying on some chosen emerging stock markets. So the literature review will support the same objective.

3.1. Literature of Turkey

Many studies which conducted on different periods in Istanbul Stock Exchange which newly known as Borsa Istanbul found a clearly presence of the day of the week effect (Dicle and Hassan, 2007). Cinko and Avci (2009) refers to a significant negative effect on Mondays (negative return), and a significant positive effect on Thursdays and Fridays (positive return). Karacaer *et al.* (2010) examine the validity of the day of the week effect in Istanbul stock exchange. They found that daily returns on stocks depend on the days of week. Basdas (2011) found that the lowest returns are in Mondays and Tuesdays, while the highest return is in Fridays. Inamlik *et al.* (2003) found the lowest return on Mondays and the highest return on Fridays compared to return on Wednesday. Oral (2012) noted that the lowest variations were on Mondays and the highest variations were on Tuesdays.

3.2. Literature of Arab Countries

Most of the studies on test the day of the week effect which conducted on the Arab markets are a relatively recent, this is due to the novelty of Arab financial markets on the one hand and on the other hand the lack of interest in Arab researchers such studies until late, anyway, the study which conducted on Bahrain's stock exchange by Gharaibeh and Hammadi (2013), this study aimed to examine the correlation between the returns on the first trading day of the week and the last trading day of the week.¹ They found that there is a positive correlation between returns on the first trading day of the week and the last trading day of the week. Al-Jafari, (2012) investigate the day-of- the-week effect on stock returns and volatility from Muscat securities market, he did not find an exist of the day-of-the-week effect, where it begins positive and also end positive with deflation during the rest of the trading days. This result is consistent with the result of the study (Abdalla, 2012) which conducted on Sudanese stock market, and also familiar with the study (Al-Barrak, 2009) which implemented on some Gulf Cooperation Council (GCC) stock markets include each of Dubai Stock Exchange, Saudi Stock Exchange, and Kuwait Stock Exchange, he found that the day of the week does not effect in Dubai Stock Exchange and Saudi Stock Exchange, while effect in Kuwaiti Stock Exchange, where the highest returns in Kuwaiti Stock Exchange were observed on the first trading day (Saturday) and the lowest returns were on the second trading day (Sunday). This result which related to Kuwait Stock Exchange is completely compatible with the study published by Al-Mutairi (2010). In another hand, the study of Ulussever *et al.* (2011) did not agree with the findings of Al-Barrak (2009) results, where they found that mean daily return is significantly different from day to

¹ I refer to the first trading day and the last trading day without determining these days because the differences between the beginning and the ending of week in Arab countries.

another which emphasizes the day-of-the week effect in Saudi Stock Exchange. Other studies conducted on Egypt stock exchange by Aly *et al.* (2004) and Amman stock exchange by Al-Rjoub (2004) found a significant negative effect on the first trading day, and significant positive effect on the last trading day of the week.

3.3. Literature of Africa

Many studies of the day of the week effect have been applied to the financial markets in the countries of Africa, including a study of day of the week seasonality in some African stock markets such as Egypt, Kenya, Morocco, Tunisia, Zimbabwe, Nigeria and South Africa, published by Alagidede (2008). His results indicate that there is no day of the week effect in Egypt, Kenya, Morocco and Tunisia, while he found a significant effect of the day of the week in Zimbabwe, Nigeria and South Africa. In another study (Mlambo and Biekpe, 2006) which conducted on nine of African stock exchange including each of Botswana, BRVM², Egypt, Mauritius, Morocco, Namibia, Tunisia, Zimbabwe, and Ghana, it has been claimed that there is a significant Monday effects on two stock exchange these are Botswana's and Morocco stock exchange while no significant effect on other countries. Also a study by Chukwuogor (2008) included five African stock markets (Botswana, Egypt, Ghana, Nigeria, and South Africa) and the result of this study is inconsistent with exist of the-day-of-the- week but refers to insignificant daily return volatility in all of these markets. In Nigerian Stock Market Ogieva *et al.* (2013) detected a negative market return on Mondays, Thursdays, and Fridays, and positive market return on Tuesday and Wednesday. In Ghana Panagiotidis and Alagidede (2009) failed to find any presence of the day of the week.

3.4. Literature of Some Other Emerging Countries

From India a study conducted on Bombay stock exchange by Jiun Chia and Sen Liew (2010) observed the presence of significant positive effect on Mondays and negative effect on Fridays, which agree with the result of a study performed on Malaysian stock market by Lim *et al.* (2010). From Pakistan a study conducted on Karachi stock exchange by Haroon and Shah (2013) found a negative Monday effect and positive Friday effects. From Sri Lanka a study applied on Colombo stock exchange by Thushara and Perera (2012) found the negative return on Mondays and Tuesdays, while the positive return on other trading days of the week.

3.5. Comments on Previous Studies

Results of previous studies were divided between those who said that there is an existence of the day of the week effect and those who said that there is no presence of the day of the week effect in stock markets. In addition, many studies preferred to a negative effect on the first trading day (Monday) and positive effect on the last trading day of the week (Friday), while others found different results. Furthermore, based on the differences in the studies there is a difference in measurement methods of the day of the week effect, while many of them used Ordinary Least Squares (OLS) regression or ANOVA to test the effect on return, others used GARCH, TAR, EGARCH, and ARCH to test a volatility of return

4. Data and Research Methodology

4.1. Data

The daily closing data set which used in this study collected from (<http://www.investing.com/indices/>) website related to major indices of five Arab Stock Exchanges shown as in Table1.

² BRVM is a regional stock exchange is located in Abidjan, Cote d'Ivoire and serving many west African countries such as Benin, Burkina Faso, Guinea Bissau, Côte d'Ivoire, Mali, Niger, Senegal, and Togo.

Table 1. Summary of sample of the Arab markets understudy

No.	Markets	Country	Major Index	Period (From)	Period (To)	Total No. of Observations
1	CASE	Egypt	EGX30	30/05/2010	17/04/2014	810
2	ASE	Jordan	A.SE general	30/05/2010	17/04/2014	885
3	PSE	Palestine	AL-Quds	30/05/2010	17/04/2014	905
4	QSE	Qatar	QE general	30/05/2010	17/04/2014	925
5	Bahrain Bourse	Bahrain	Bahrain All Shares	30/05/2010	17/04/2014	905

Trading days of all previous stock markets consist of five days during the week, starting from Sunday to Thursday. And the daily returns for all markets are computed by the logarithmic equation as follow:

$$R = \ln(P_t/P_{t-1}) \quad (1)$$

where R refers to the daily return on the indices on day t, P_t is the closing price in day t, and P_{t-1} is the closing price in the day before.

4.2. Research Methodology

To examine the effect day of the week on stock returns, the researcher estimates the following regression equation by using one-way analysis of variance (ANOVA) which used to define significant differences between mean returns of the days of the week.³

$$R_t = \beta_1 + \beta_2 D_{2t} + \beta_3 D_{3t} + \beta_4 D_{4t} + \beta_5 D_{5t} + \varepsilon_t \quad (2)$$

where:

R_t: is the daily return (dependent variable) as calculated by equation (1).

β₁: constant or stock return on Sunday.

β₂ - β₅: stock return on Monday, Tuesday, Wednesday, and Thursday respectively. While β₁ to β₅ are independent variables.

D_{2t}: is dummy variable which take a value 1 if the day t is Monday and 0 otherwise.

D_{3t}: is dummy variable which take a value 1 if the day t is Tuesday and 0 otherwise.

D_{4t}: is dummy variable which take a value 1 if the day t is Wednesday and 0 otherwise.

D_{5t}: is dummy variable which take a value 1 if the day t is Thursday and 0 otherwise.

ε_t: The error term, or residual absorbed all stochastic variation.

5. Data Analysis and Results

5.1. Descriptive Statistics

Table 2 below gives some useful descriptive statistics, containing the mean, standard deviation and 95% confidence intervals for the daily stock return (dependent variable) for each independent group days (Sunday, Monday, Tuesday, Wednesday, and Thursday) to each stock market under study, also, when the groups are combined as a total. As a result of Table 2, there are no meaningful differences among daily stock return and any trading day through the week in each stock market under study.

³ In my analysis I will depend on the assumption which says, If the stock exchange reflects a traditional Monday (first trading day) effect, then the result of coefficient β₁ is expected to be statistically, negative and significant. That means Monday (first trading day) return should be lower than returns during other days.

Table 2. Detail of descriptive statistics of the return on different days

Country	Days	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Qatar	Sunday	185	0.001477	0.008572894	0.000630292	0.00023327	0.002720327	-0.02989	0.035102
	Monday	185	-0.00024	0.006629992	0.000487447	-0.00120598	0.000717427	-0.03239	0.025388
	Tuesday	185	0.000394	0.008138466	0.000598352	-0.000786952	0.001574073	-0.03633	0.04748
	Wednesday	185	0.000822	0.006766031	0.000497448	-0.000159084	0.001803789	-0.03634	0.019752
	Thursday	185	0.000958	0.00559629	0.000411447	0.000146446	0.001769968	-0.02221	0.014104
	Total	925	0.000681	0.007229458	0.000237703	0.000214828	0.001147829	-0.03634	0.04748
Jordan	Sunday	177	-0.00069	0.007817357	0.000587589	-0.0018545	0.000464752	-0.04994	0.035213
	Monday	177	-0.00071	0.005022219	0.000377493	-0.001455812	3.41792E-05	-0.01519	0.017568
	Tuesday	177	-2.9E-05	0.005638538	0.000423818	-0.000865186	0.000807654	-0.01818	0.020856
	Wednesday	177	0.000198	0.005205317	0.000391256	-0.000574494	0.000969818	-0.01862	0.014867
	Thursday	177	0.000638	0.004960272	0.000372837	-9.73579E-05	0.001374255	-0.01147	0.018543
	Total	885	-0.00012	0.005838212	0.000196249	-0.000504838	0.0002655	-0.04994	0.035213
Palestine	Sunday	181	-0.00095	0.007340989	0.000545651	-0.002025547	0.000127846	-0.02519	0.033094
	Monday	181	-0.00036	0.005536467	0.000411522	-0.00117564	0.000448417	-0.02538	0.034483
	Tuesday	181	0.000803	0.005768759	0.000428788	-4.34595E-05	0.001648738	-0.01901	0.03558
	Wednesday	181	0.000514	0.004924316	0.000366022	-0.000207756	0.001236734	-0.01683	0.020774
	Thursday	181	0.000515	0.005486024	0.000407773	-0.000289489	0.001319771	-0.03049	0.022183
	Total	905	0.000104	0.005891687	0.000195846	-0.000280405	0.000488328	-0.03049	0.03558
Egypt	Sunday	162	0.000511	0.03247395	0.002551394	-0.004527034	0.005549995	-0.25089	0.159013
	Monday	162	-0.00272	0.014446822	0.00113505	-0.004961043	-0.000478033	-0.04241	0.073143
	Tuesday	162	0.000939	0.015689912	0.001232716	-0.001495189	0.003373566	-0.0489	0.053356
	Wednesday	162	0.000892	0.012965324	0.001018652	-0.001119427	0.002903858	-0.05305	0.040195
	Thursday	162	0.001894	0.011528669	0.000905778	0.000105392	0.003682866	-0.04716	0.025712
	Total	810	0.000303	0.019047194	0.00066925	-0.001010176	0.001617167	-0.25089	0.159013
Bahrain	Sunday	181	-0.0001	0.005106119	0.000379535	-0.000851184	0.000646636	-0.01888	0.020598
	Monday	181	-0.00042	0.004861107	0.000361323	-0.001134883	0.000291065	-0.02711	0.015105
	Tuesday	181	-6.1E-05	0.004281706	0.000318257	-0.000688925	0.000567063	-0.01646	0.012989
	Wednesday	181	0.000106	0.004767409	0.000354359	-0.000592992	0.000805471	-0.01963	0.011899
	Thursday	181	0.000344	0.005228054	0.000388598	-0.000422476	0.001111111	-0.02765	0.014304
	Total	905	-2.7E-05	0.004855775	0.000161411	-0.000343696	0.000289873	-0.02765	0.020598

Notes: The mean represents the average return on the same day during the study period.

5.2. One-Way ANOVA Analysis

Table 3. One way-ANOVA results for the day of the week effect

		Sum of Squares	df	Mean Square	F	Sig.
Qatar	Between Groups	0.000308742	4	7.71856E-05	1.479878	0.206205
	Within Groups	0.047984178	920	5.21567E-05		
	Total	0.048292921	924			
Jordan	Between Groups	0.000241432	4	6.03579E-05	1.777046	0.131327
	Within Groups	0.029889463	880	3.39653E-05		
	Total	0.030130895	884			
Palestine	Between Groups	0.000389655	4	9.74137E-05	2.829054	0.023811
	Within Groups	0.030989973	900	3.44333E-05		
	Total	0.031379627	904			
Egypt	Between Groups	0.002018974	4	0.000504744	1.393972	0.234199
	Within Groups	0.291482652	805	0.00036209		
	Total	0.293501626	809			
Bahrain	Between Groups	5.76304E-05	4	1.44076E-05	0.609993	0.655524
	Within Groups	0.02125738	900	2.36193E-05		
	Total	0.02131501	904			

The results of Table 3 reflect the analysis of variance to study if there are differences in average stock return according to the trading days, in another words, stock returns are differ depending on the trading day. The results indicate the lack of a moral test, means no significant differences or the average stock return does not vary according to the different days in all stock market under study except Palestine Stock Market which show significant level at 0.023 which is below 0.05, that mean there is a statistically significant difference in the mean between daily stock return and the trading days through the week, but we do not know exactly which day is differ. So to be sure about the differ trading day we should use another test which is Post Hoc test which make a multiple comparison among all trading days to find which day is differ.

5.3. Post Hoc Tests: Multiple Comparisons (Tukey HSD)⁴

According to the result shown in Table 4 below, the only significant difference is between Sunday and Tuesday in Palestine Stock Market ups and downs by 0.001751 which is a negligible value.

⁴ Tukey's multiple comparison test is one of several tests that can be used to determine which means amongst a set of means differ from the rest.

Table 4. The result of multiple comparisons among trading days

Dependent Variable	(I) Days	(J) Days	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Palestine	Sunday	Monday	-0.000585239	0.000616829	0.877614063	-0.002271228	0.00110075
		Tuesday	-0.00175149	0.000616829	0.037181238	-0.003437479	-6.55004E-05
		Wednesday	-0.001463339	0.000616829	0.123861623	-0.003149328	0.00022265
		Thursday	-0.001463991	0.000616829	0.123561426	-0.00314998	0.000221998
	Monday	Sunday	0.000585239	0.000616829	0.877614063	-0.00110075	0.002271228
		Tuesday	-0.00116625	0.000616829	0.323016995	-0.002852239	0.000519739
		Wednesday	-0.0008781	0.000616829	0.612559514	-0.002564089	0.000807889
		Thursday	-0.000878752	0.000616829	0.61187316	-0.002564741	0.000807237
	Tuesday	Sunday	0.00175149	0.000616829	0.037181238	6.55004E-05	0.003437479
		Monday	0.00116625	0.000616829	0.323016995	-0.000519739	0.002852239
		Wednesday	0.00028815	0.000616829	0.990229782	-0.001397839	0.00197414
		Thursday	0.000287498	0.000616829	0.99031353	-0.001398491	0.001973487
	Wednesday	Sunday	0.001463339	0.000616829	0.123861623	-0.00022265	0.003149328
		Monday	0.0008781	0.000616829	0.612559514	-0.000807889	0.002564089
		Tuesday	-0.00028815	0.000616829	0.990229782	-0.00197414	0.001397839
		Thursday	-6.52187E-07	0.000616829	1	-0.001686641	0.001685337
	Thursday	Sunday	0.001463991	0.000616829	0.123561426	-0.000221998	0.00314998
		Monday	0.000878752	0.000616829	0.61187316	-0.000807237	0.002564741
	Tuesday	-0.000287498	0.000616829	0.99031353	-0.001973487	0.001398491	
	Wednesday	6.52187E-07	0.000616829	1	-0.001685337	0.001686641	

Notes:* The mean difference is significant at the .05 level.

6. Findings and Conclusion

This paper examines daily stock returns data for five Arab stock exchanges Indexes (Bahrain all shares, QE general, Amman SE general, Al-Quds, and EGX30) from 2010-2014 to test for the day of the week effect in each of Bahrain, Qatar, Jordan, Palestine, and Egypt stock exchange, which give a unique opportunity to test for calendar anomalies, that because all of these stock markets under study where trading takes place from Sunday to Thursday as opposed to the more traditional markets trading from Monday to Friday.

The empirical result state that the day of the week effect only exist in Palestine stock exchange that's where the stock return in Sunday (the first trading day of the week) is significant (0.023) and negative (-0.00095), where the lowest return is on Sunday and the highest return is on Tuesday.

In Egypt there is insignificant effect (0.23) with positive return in all trading days, also in Qatar there is insignificant effect (0.20) with positive return in all trading days except Monday (-0.00024). In Jordan and Bahrain there are the same result refer to insignificant effect (0.13, 0.65) respectively, with negative return in the first three trading days (Sunday, Monday, and Tuesday) and positive return in others.

Finally we can say that there is no presence of the day of the week effect in Egypt which is consistent with the findings of Aly *et al.* (2004), and the same result in Bahrain which is inconsistent with the findings of Gharaibeh and Hammadi (2013). Also the paper does not find any exist of the day of the week effect in Qatar stock exchange which agree with Al-Jafari (2012). In Jordan stock exchange, we did not any effect of the day of the week which

inconsistent with the findings of Alrabadi and Al-Qudah (2012), only we observed an existence of the day of the week effect in Palestine stock exchange which is consistent with the findings of Kamaly and Tooma (2009).

References

- Abdalla, S., 2012. Day-of-the-week effect on returns and conditional volatility: Empirical evidence from Sudanese stock market. *Middle Eastern Finance and Economics*, 16, pp.167-180.
- Alagidede, P. 2008. Day of the week seasonality in African stock markets. *Applied Financial Economics Letters*, 4(2), pp.115-120. <http://dx.doi.org/10.1080/17446540701537749>
- Al-Barrak, A., 2009. Day-of-the-week effect in some of Gulf Cooperation Council (GCC) stock markets. *WIT Transactions on Information and Communication Technologies*, 41, pp.149-156.
- Al-Jafari, M.K., 2012. An empirical investigation of the day-of- the-week effect on stock returns and volatility: Evidence from Muscat Securities Market. *International Journal of Economics and Finance*, 4(7), pp.141-149. <http://dx.doi.org/10.5539/ijef.v4n7p141>
- Al-Mutairi, A.M., 2010. An investigation of the day-of-the-week effect in the Kuwait Stock exchange. *Research Journal of International Studies*, 16, pp.191-197.
- Alrabadi, D., and Al-Qudah, K., 2012. Calendar anomalies: The case of Amman Stock Exchange. *International Journal of Business and Management*, 7(24), pp.120-127. <http://dx.doi.org/10.5539/ijbm.v7n24p120>
- Al-Rjoub, S., 2004. The daily return pattern in the Amman Stock Exchange and the weekend effect. *Journal of Economic Cooperation*, 25(1), pp.99-114. <http://dx.doi.org/10.2139/ssrn.484782>
- Aly, H., Mehdian, S., and Perry, M., 2004. An analysis of day-of-the-week effects in the Egyptian Stock Market. *International Journal of Business*, 9(3), pp.301-308.
- Basdas, U., 2011. The day of the week effect for Istanbul stock exchange: A stochastic dominance approach. *Journal of Applied Finance and Banking*, 1(4), pp.223-238.
- Beker, P. and Espino, E. 2013. Short-term momentum and long-term reversal in general equilibrium. *Journal of Economic Theory*, 11, pp.1-44.
- Borowski, K., 2015. Analysis of the weekend effect on the markets of 121 equity indices and 29 commodities. *Eurasian Journal of Business and Management*, 3(4), pp.23-35. <http://dx.doi.org/10.15604/ejbm.2015.03.04.003>
- Borowski, K. and Lukasik, M., 2015. Analysis of selected seasonality effects in the following agricultural markets: Corn, wheat, coffee, cocoa, sugar, cotton and soybeans. *Eurasian Journal of Business and Management*, 3(2), pp.12-37. <http://dx.doi.org/10.15604/ejbm.2015.03.02.002>
- Chukwuogor, C., 2008. An econometric analysis of African Stock Market: Annual returns analysis, day-of-the-week effect and volatility of returns. *International Research Journal of Finance and Economics*, 1(1), pp.369-378.
- Cinko, M. and Avci, E., 2009. Examining the day of the week effect in Istanbul Stock Exchange (ISE). *International Business & Economics Research Journal*, 8(11), pp.1-6.
- Cross, F., 1973. The behavior of stock prices on Fridays and Mondays. *Financial Analysts Journal*, 29(6), pp.67-69. <http://dx.doi.org/10.2469/faj.v29.n6.67>
- Dicle, M. and Hassan, M., 2007., Day of the week effect in Istanbul stock exchange. *Scientific Journal of Administrative Development*, 5, pp.1-27.
- Eriotis, N., Vasilioiu, D., and Papathanasiou, S., 2006., Testing technical anomalies in Athens Stock Exchange (ASE). *European Research Studies*, 9(3-4), pp.75-90.
- Fama, E.F., 1970., Efficient capital markets: A review of theory and empirical work. *Journal of Finance*, 25(2), pp.383-417. <http://dx.doi.org/10.2307/2325486>
- Fama, E.F., 1991., Efficient capital markets: II. *The Journal of Finance*, 46(5), pp.1575-1617. <http://dx.doi.org/10.1111/j.1540-6261.1991.tb04636.x>

- Gharaibeh, A. and Hammadi, F., 2013., The day of the week anomaly in Bahrain's Stock Market. *International Management Review*, 9(2), pp.60-69.
- Haroon, M.A. and Shah, N., 2013., Investigating day-of-the-week effect in stock returns: Evidence from Karachi Stock Exchange-Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 7(2), pp.381-393.
- Inamlik, A., Berument, H., and Kiyamaz, H., 2003. The day of the week effect on stock market volatility Istanbul Stock Exchange. *Review of Financial Economics*, 12, pp.363-380. [http://dx.doi.org/10.1016/S1058-3300\(03\)00038-7](http://dx.doi.org/10.1016/S1058-3300(03)00038-7)
- Jiun Chia, R., and Sen Liew, V., 2010., Evidence on the day-of-the-week effect and asymmetric behavior in the Bombay Stock Exchange. *The IUP Journal of Applied Finance*, 16(6), pp.17-30.
- Kamaly, A. and Tooma, E., 2009. Calendar anomalies and stock market volatility in selected Arab stock exchanges. *Applied Financial Economics*, 19(11), pp.881-892. <http://dx.doi.org/10.1080/09603100802359976>
- Karacaer, S., Kapusuzoglu, A., and Bozkurt, F., 2010. From the anomalies of the days of the week point of view testing of the validity of efficient market hypothesis: Evidence from Istanbul Stock Exchange. *Banking and Finance Letters*, 2(1), pp.215-221.
- Lim, S., Mun Ho, C., and Dollery, B., 2010. An empirical analysis of calendar anomalies in the Malaysian Stock Market. *Applied Financial Economics*, 20(3), pp.255-264. <http://dx.doi.org/10.1080/09603100903282648>
- Mlambo, C. and Biekpe, N., 2006. Seasonal effects: Evidence from emerging African stock markets. *South African Journal of Business Management*, 37(3), pp.41-52.
- Ogieva, O., Osamwonyl, I., and Idolor, E., 2013. Testing calendar effect on Nigerian Stock Market return: Methodological approach. *Journal of Financial Management and Analysis*, 26(1), pp.39-64.
- Oral, E., 2012. Day of the week effect on Turkish Foreign Exchange Market volatility during the global financial crisis. *Munich Personal RePEc Archive (MPRA)*, Paper No.44116, pp.1-8.
- Srinivasan, P. and Kalaivani, M., 2013. Day-of-the-week effects in the Indian Stock Market. *Munich Personal RePEc Archive (MPRA)*, Paper No.46805, pp.1-22.
- Panagiotidis, T. and Alagidede, P., 2009. Calendar anomalies in the Ghana Stock Exchange. *Journal of Emerging Market Finance*, 8(1), pp.1-23. <http://dx.doi.org/10.1177/097265270900800101>
- Thushara, S. and Perera, P., 2012. Day of the week effect of stock returns: Empirical evidence from Colombo Stock Exchange. *Kelaniya Journal of Management*, 1(2), pp.16-27.
- Ulussever, T., Yumusak, I., and Kar, M., 2011. The day-of-the-week effect in the Saudi Stock Exchange: A non-linear garch analysis. *Journal of Economic and Social Studies*, 1(1), pp.9-23. <http://dx.doi.org/10.14706/JECOSS11112>