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Investigating Day-of-the-Week Effect in Stock Returns: Evidence from Karachi Stock Exchange - Pakistan

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Abstract

This paper investigates Day-of-the-Week Effect in stock returns in the primary equity market Karachi Stock Exchange (KSE) of Pakistan by employing OLS regression approach. Data consists of daily closing prices of KSE-100 Index from January 01, 2004 to December 30, 2011. A traditional method of finding Day-of-the-Week Effect has been comprised of only one regression equation. Contrary to this plausible methodology, this paper proposes five separate models to statistically find significant effect on each trading day of the week. Non-parametric Kolmogorov-Smirnov (K-S) test confirms abnormal distribution of returns. Robust Standard Error addresses heteroscedasticity of returns; proved by abnormal distribution. The t- statistics tests significance of β coefficients and One Factor ANOVA tests the hypotheses related to significant difference of mean returns. Findings conclude mixed results due to the effect of political instability on the anomaly. No effect found in Sub Period I. While, negative Monday and Positive Friday effects revealed in Sub Period II; result consistent with the findings of Fields (1931), Cross (1973), French (1980) and Haroon (2005).

Keywords: Karachi Stock Exchange; Day-of-the-week effect; KSE-100 index; OLS regression.

1. Introduction

Stock markets are considered as one of the major component of financial system of the capitalistic world. They provide place for the trading of financial assets such as stocks and bonds of joint stock companies, guilt age securities, unit trusts and other financial products efficiently, systematically, and by protecting the interest of investors. Stock market functions as bridge and enables individuals as well as institutions to add in country's wealth through their participation in the secondary market of the country. A well-regulated stock market promotes the phenomenon of fair pricing of securities and reduces transactional costs. It stimulates economic growth, promotes economic activity and an ample source of increasing employment in the country. A good performance of

stock market is a strong indicator of healthy economy. Because of aforesaid reasons, stock traders keenly observe any single movement of stock index which may affect their future profitability or help them to evaluate their portfolios. They also keenly observe the economy; any sudden incident or change that may affect their decisions of buying and selling stocks. Three stock exchanges are currently functioning in Pakistan namely Karachi Stock Exchange, Islamabad Stock Exchange and Lahore Stock Exchange.

Calendar anomaly or Seasonality is the most puzzling topic in finance on which numerous studies have been conducted during the last three decades. Some of these stock anomalies are Day-of-the-Week Effect, Weekly Effect, Month-of-the-Year Effect, Weekend Effect, Ramadan Effect and January Effect etc. The most interesting of them is Day-of-the-Week Effect which has attracted attention of researchers around the world.

Day-of-the-Week Effect refers to the observations that mean stock returns are differently distributed among different week days. This phenomenon contradicts the weak form of efficient market hypothesis given by Fama (1970) which says that; all relevant information available to the market participants should not allow them to earn abnormal returns (Marquering W. 2002). More specifically, weak form of Efficient Market Hypothesis suggests that stock prices and stock returns should be normally distributed. In contrast, the evidence collected from studies suggests the presence of seasonal or calendar anomalies and thus stock returns are not constant.

2. An Overview of Karachi Stock Exchange (KSE)

Karachi Stock Exchange is known as the premiere and the most liquid stock exchange of Pakistan with over 592 companies listed (divided into 33 different sectors). It is well-known as the second oldest stock exchange in South Asia (Bashir et al 2011).World famous magazine "Business Week" declared it the "Best Performing Stock Market of the World for the year 2002" (Business Week Magazine). In 2008, it was declared the best performing emerging market (Gulf News 2008). KSE is regulated by SECP. Rules and regulations are issued with a view to protect investors' interest ensuring safe and fair dealing with efficiency in the market. On June 30, 2011 the KSE-100 Index produced a return of 28.5% from 9722 to 12496 on the basis of which KSE secured fifth rank amongst 12 emerging Asian countries in the list of best performing equity markets (KSE Annual Report 2011).

The objective of this study is to explore Day-of-the-Week Effect in Karachi Stock Exchange by employing new methodology. A traditional method of finding Day-of-the-Week Effect has been comprised of only one regression equation. This potential drawback served as motivation for this paper. The rest of this paper will follow the following pattern: Section 3 elaborates scope of the study, Section 4 discusses literature review, section 5 defines data, section 6 elucidates hypotheses, section 7 elaborates the research methodology, section 8 reveals analysis and results, Section 9 discusses the conclusion of the study, and section 10 enlists the literature cited for the study.

3. Scope of the Study

This study is based on the KSE-100 Index data from January 2004 to December 2011. During the period under review there were various anomalies, economic and political events, legislative changes and structural reforms that have affected the Pakistani equity markets. In this study we compare two political periods: one Musharraf's regime

from 2004 - 2007 and other democratic government 2008 - 2011. The period I shows great political uncertainty. Prime Ministers of Pakistan kept on changing as well the country was ruled by a Militant President for the first time in history. Though, it was seen as a period of unprecedented economic growth. This era evidenced optimum level reserves, growth in GDP, high foreign investment, no requirement of IMF funds. Pakistani stock markets offered more buoyancy and dynamism. However, the last year of period, 2007 constituted some bad events emergency rule imposed by Pervaiz Musharraf and stock market faced biggest one day decline; KSE-100 Index fell nearly 5%.

Although, Period II comprised of a period of democratic and political stability but it confronted increased violence, political fights, suicide bombing, extensive flood, raised militancy along western borders of the country, skyrocketing inflation and gigantic budget deficits, huge IMF Loans, energy crises, accelerating unemployment, and climbing oil prices in international market. All these resulted in the steep decay of the stock market. However the market rebounded strongly in 2009 and the trend continued in 2011. As we know that investment pattern vary extensively due to consistently changing expectations of investors and participants about economically beneficial strategies. Investors, in order to get more benefits, are interested in investing or withdrawing on any particular day of the week. In this paper we are going to answer that question: Is there any day of the week on which investor can get more benefit by investment or withdrawal?

4. Literature Review

Day-of-the-Week Effect proposes the stock returns vary among different trading days of the week. The First day of the week is usually considered as a week day because the market remains bearish, while on the last day of the week the market is found bullish. It can be supported with the explanation given by Mehdian and Perry (2001), that unfavorable news mostly announced during the weekend shake the confidence of the investors; stimulate them to sell their holdings on the coming Monday. Increase in supply of the stocks cause prices to fall and resultantly return declines. Some researchers elucidated the reason for this anomaly is the investors' psychology; due to the announcement of bad news on the weekend investors feel pessimistic on the first trading day, whereas they feel optimistic on the last trading day and proceed on sales and purchases. Nevertheless, the above explanations are not enough to adequately explain the phenomenon which makes this anomaly the subject for continuous research.

This section outlines the relevant work done by different academicians, researchers and investigators: Some of the pioneers who have contributed on this particular area include Cross (1973) and French (1980), studied 50 shares of Standard & Poor's Composite Index to find Day-of-the-Week Effect and claimed higher mean returns on Friday and lower mean returns on Monday. Whereas, Berument and Kiymaz (2001) reported highest and lowest returns on Wednesday and Monday respectively by studying shares of Standard & Poor's Composite Index using OLS and GARCH Model. In addition, volatility was highest on Friday and lowest on Wednesday.

Gibbons and Hess (1981) and Keim and Stambaugh (1984) studied the Dow Jones Industrial Index and found negative Monday returns. Keim also described the positive correlation between Friday and Monday returns. Similarly, Draper and Paudyal (2002)

conducted research on London stock exchange by using OLS and robust regression procedure. They explained strong negative Monday returns, indicating the Monday effect initiated by various factors. Day-of-the-Week Effect in Kuwait stock exchange was investigated by Al- Mutairi (2010) using the three GARCH Models: GARCH, E-GARCH and T-GARCH found higher returns on Saturday which is first day of the week. Similar results were observed by Ulussever et al (2011) in TADAWAL stock exchange.

Various other investigators have studied on different markets to observe Day of the week anomaly. Some of these studies include: Jaffe and Westerfield (1985) found weekend effect in stock markets of four developed countries: Australia, Japan, UK and Canada. Aggarwal and Rivoli (1989) revealed the presence of strong Tuesday effect in four Asian emerging markets: Hong Kong, Singapore, Malaysia and Philippines. Kiymaz and Berument (2003) evaluated different international markets and found returns are highly volatile on Monday for Germany and Japan, on Thursday for United Kingdom and on Friday for Canada and United States. Similarly, Basher and Sadorsky (2006) analyzed the closing returns of major stock indexes of 21 emerging stock markets and the Morgan Stanley Capital International (MSCI) World index by employing regression model adjusted for the market risk and volatility in returns. The results showed negative Tuesday effect and positive Friday effect in Pakistan and Taiwan respectively, Philippines has both Tuesday and Friday effect. No significant results found in other countries. Furthermore, Apolinario et al. (2006) used GARCH and T-ARCH models to analyze Day-of-the-Week Effect on major European stock markets and concluded that most European markets do not reflect Day-of-the-Week Effect except French and Swedish markets although volatility of returns in specific markets followed similar behavior.

Several studies found no significant proof of Day-of-the-Week Effect in different stock exchanges. Demirer and Karan (2002) studied Istanbul Stock Exchange by applying regression equation on the unadjusted returns and on returns adjusted for inflation; found no Day-of-the-Week Effect. They added that Start of the week is the good indicator of behavior of market during the whole week. Agathee (2008) found no significant results on SEMDEX. Similarly no Day-of-the-Week Effect was unveiled by Lin and Yeh (2011) among eight major industries in Taiwan stock exchange.

A brief review of studies conducted to investigate Day-of-the-Week Effect in emerging market of Pakistan is as follows: Khilji (1994) observed monthly returns are time dependent. Haroon (2005) provided evidence of Monday or week day effect by rejecting the weak form efficiency in KSE. In contradiction, Husain (1999) studied KSE-100 Index and found no Day-of-the-Week Effect in Pakistani equity market. Later on, Nishat and Mustafa (2002) reported no weekly effect on returns and conditional variance in Pakistani stock markets by examining KSE-100 Index from 1991 to 2001. Mahmood (2007) also evidenced the presence of random walk in Karachi Stock Exchange. Furthermore, Ahmed and Roser (1995) clarified that Pakistani equity market displays complex dynamics due to presence of speculative bubbles. Ali and Akbar (2009) studied Pakistani stock market by using AR1 and OLS regression model on returns data of KSE-100 share Index from November 1991 to October 2006. They found no weekly effects or monthly effects in stock returns.

Some recent studies include: Husain et al (2011) used OLS regression and concluded

that stock market returns for Tuesday are higher and more volatile than other days of the week. Bashir et al (2011) refuted Efficient Market Hypothesis in banking sector of Pakistan. They studied the daily closing stock prices of 11 major trading banks listed on KSE by using the Co-integration and VAR test.

The point of attention in the above literature is the employment of only one regression equation to find several Day-of-the-Week Effects. This obvious shortcoming influenced to enrich the literature with new methodology by giving possible explanation and insight about this phenomenon, primarily focusing Pakistani equity market.

5. Data

The data comprises of daily closing price of KSE-100 index from January 01, 2004 to December 30, 2011 except official holidays. It is pointed out here that KSE operates five days in a week from Monday to Friday. We calculate natural log of daily returns in order to reduce the effect of size of daily stock prices. The daily return is calculated by using the following formula:

Table 1: Division of Timeline

Sub Periods	Duration	No. Of observations
Sub Period I	Jan 01, 2004 – Dec 31, 2007	967
Sub Period II	Jan 01, 2008 – Dec 30, 2011	890

$$R_X = (\ln KSE\ 100_X - \ln KSE\ 100_{X-1}) * 100$$

Where, R_X is the return on KSE-100 Index on day x, KSE 100_X is the closing price of KSE-100 Index on day x and KSE 100_{X-1} is the closing price of KSE-100 index on day x-1. Data has been collected from database of Karachi Stock Exchange. The whole sample period consists of 1857 observations. For the purpose of study we divide our data in two equal Sub Periods. The necessary detail is given in Table 1.

6. Hypotheses

Following hypotheses has been developed for testing Day-of-the-Week Effect on returns in KSE:

H_1: The mean stock returns across all trading days of the week are significantly different and Day-of-the-Week Effect is present in Sub Period I (2004 – 2007).

H_2: The mean stock returns across all trading days of the week are significantly different and Day-of-the-Week Effect is present in Sub Period II (2008 – 2011).

7. Research Methodology

Ordinary Least Squares (OLS) Regression is the common approach employed by the previous studies to investigate Day-of-the-Week Effect in stock returns. But their shortcoming lies in utilizing only one regression equation to find effect on all trading days of the week. This approach is possible only if we hold a prior belief that an effect exists on one specific day, such as Monday. However, this specification is not appropriate if we have no previous expectation on which of the Day-of-the-Week Effect might exist. We overcome this shortcoming by estimating a different model for finding effect on each trading Day of the Week by omitting the dummy variable for the day under scrutiny in each case Borges (2009).

$$\textit{Monday Effect:} \quad R_{Mx} = \alpha + \beta_2 T_x + \beta_3 W_x + \beta_4 TH_x + \beta_5 F_x + e_x$$

$$\textit{Tuesday Effect:} \quad R_{Tx} = \alpha + \beta_1 M_x + \beta_3 W_x + \beta_4 TH_x + \beta_5 F_x + e_x$$

$$\textit{Wednesday Effect:} \quad R_{Wx} = \alpha + \beta_1 M_x + \beta_2 T_x + \beta_4 TH_x + \beta_5 F_x + e_x$$

$$\textit{Thursday Effect:} \quad R_{THx} = \alpha + \beta_1 M_x + \beta_2 T_x + \beta_3 W_x + \beta_5 F_x + e_x$$

$$\textit{Friday Effect:} \quad R_{Fx} = \alpha + \beta_1 M_x + \beta_2 T_x + \beta_3 W_x + \beta_4 TH_x + e_x$$

Where,

R_{Mx} , R_{Tx}, R_{Wx}, R_{THx} and R_{Fx} =	Index returns on day Monday, Tuesday, Wednesday, Thursday and Friday respectively.
α =	Mean return on respective day
β_1 -- β_5 =	OLS coefficients which represents the difference between the mean return for the particular day (Monday, Tuesday, Wednesday, Thursday and Friday) and the mean return for that day under scrutiny in each case respectively.
D_{Mx}, D_{Tx}, D_{Wx}, D_{THx}, D_{Fx} =	Dummy variables for Monday, Tuesday, Wednesday, Thursday and Friday respectively; D_{MX}, = 1 if x is Monday; otherwise 0 for all other days, D_{TX} = 1 if x is Tuesday; otherwise 0 for all other days and so forth.
e_x =	Robust Standard Error.

Daily return data is distributed abnormally which proves heteroscedasticity in returns; thus requires Robust Standard Error in linear regression model (Borges 2009). Robust Standard Error is the White's heteroscedasticity consistent standard errors. To prove Day-of-the-Week Effect on any day (1) the mean return of the day should be significant and (2) at least two of the excess returns should be significantly different from the mean return of the day under scrutiny.

8. **Analysis and Results**

8.1 Descriptive Statistics

Descriptive statistics of the KSE-100 Index returns for whole sample period is reported in Table 2.

Table 2: Descriptive Statistics for Daily Return For Sample Period			
Sample Period		January 01, 2004 to December 30, 2011	
Observations (N)		1857	
Maximum Return		10.68888	
Minimum Return		-0.42428	
Mean Return		0.050149	
Standard Deviation		1.812417	
Variance		3.285	
Skewness	-7.205	Std. Error	0.057
Kurtosis	164.983	Std. Error	0.114

Table 2 summarizes the basic Descriptive Statistics of KSE-100 Index returns for entire sample period. The skewness and kurtosis of total returns demand attention. Skewness suggests data is tailed towards smaller values and it is left or negatively skewed. High value of kurtosis indicates distribution is more clustered and thick tailed or leptokurtic. (Demirer and Karan, 2002) reported that stock exchange returns often have leptokurtic distribution. Moreover, returns are abnormally volatile on Thursday. The implications are vivid by histogram of the returns and the K-S normality test; both rejecting the normality of returns.

Figure 1 portrays the histogram of returns with normal distribution curve. The curve looks much normal which suggests that the errors may be fairly normal. Since the value of skewness and kurtosis are much more than their respective standard error values this suggests a degree of abnormality in returns.

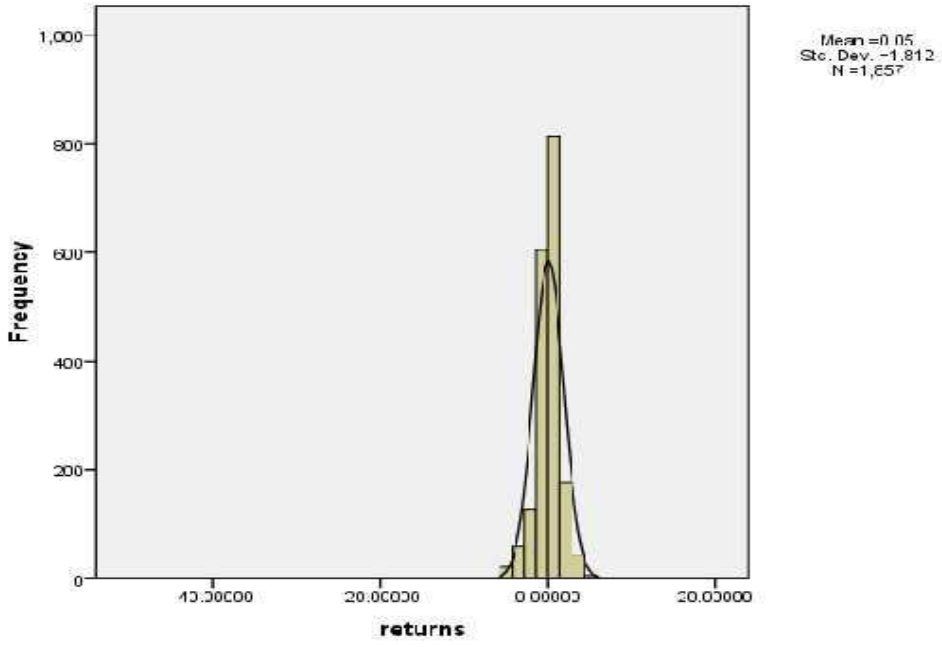

Figure 1: Histogram of Daily Returns (With Normal Curve)

Table 3 describes the results of non - parametric Kolmogorov-Smirnov (K-S) Goodness of fit test. Probability of Z score at 5% significance level confirms the abnormality of distribution.

Table 3: One Sample Kolmogorov-Smirnov Goodness of Fit Test		
		Sample
N		1857
Normal Parameters [a]	Mean	0.0501489
	Standard Deviation	1.81241711
Most Extreme Differences	Absolute	0.136
	Positive	0.107
	Negative	-0.136
Kolmogorov-Smirnov Z		5.874
Asymp. Sig. (2-tailed)		0.000

a. Test distribution is Normal.

The basic statistics of the returns of two Sub Periods for each day of the week are presented in Table 4.

Table 4: Summary Statistics For Daily Return For Sub Periods					
Sub Period I					
	Mon	**Tues**	**Wed**	**Thur**	**Fri**
N	193	188	193	197	195
Max. Return	10.6889	3.9573	4.2498	4.5758	4.2157
Min. Return	-4.8280	-4.5342	-6.0624	-4.4799	-4.2902
Mean Return	-0.062528	0.250465	0.282602	0.076064	0.102683
P Value	0.671	0.021	0.005	0.465	0.267
Std. Deviation	2.0431	1.4703	1.3934	1.4587	1.2888
Variance	4.174	2.162	1.942	2.128	1.661
Skewness	0.789	-0.794	-0.692	-0.570	-0.625
Std. Error	0.175	0.177	0.175	0.173	0.174
Kurtosis	4.820	1.709	2.717	2.262	1.968
Std. Error	0.348	0.353	0.348	0.345	0.346
Sub Period II					
	Mon	**Tues**	**Wed**	**Thur**	**Fri**
N	174	180	180	181	175
Max. Return	5.4056	8.2547	4.7725	4.7032	4.3185
Min. Return	-4.5346	-12.8890	-5.1349	-42.4288	-4.7243
Mean Return	-0.270874	0.076235	0.129554	-0.244521	0.187450
P Value	0.018	0.543	0.230	0.331	0.050
Std. Deviation	1.5006	1.6767	1.4421	3.3780	1.3168
Variance	2.252	2.811	2.079	11.411	1.734
Skewness	-0.224	-1.821	-0.373	-10.908	-0.197
Std. Error	0.184	0.181	0.181	0.181	0.184
Kurtosis	1.891	22.031	2.250	136.742	2.991
Std. Error	0.366	0.360	0.360	0.359	0.365

In Sub Period I the mean return for Monday is lowest and Wednesday has the highest mean return this result is similar to one found by Berument and Kiymaz (2001) studied S&P 500 stock index. Monday shows lowest mean return and Friday shows highest mean return in Sub Period II. These results are consistent with Fields (1931), Cross (1973) and French (1980).

Another substantial phenomenon is Volatility. In Sub Period I, Monday returns are most volatile as it possesses highest variance, skewness and Kurtosis. In Sub Period II, Thursday returns show highest variance, skewness and Kurtosis. Another difference between both Sub Periods is that Sub Period II has high variance, skewness and kurtosis values than Sub Period I. High skewness suggests a less developed market moving asymmetrically to 'news' and huge kurtosis provides that movements of share prices are very large. Gupta (1997) termed these movements the result of "euphoria to despondency cycles".

8.2 OLS Regression Results

Table 5 and table 6 exhibit the estimates of parameters along with t- statistics for Sub Period I and II respectively for each day effect. The significance is considered at 5% level. F Value is also calculated by testing model for each day effect through ANOVA at 5% significance level.

OLS results for Sub Period I negate the presence of Day-of-the-Week Effect since most of the β coefficients are not significant from each other, except one in Thursday and Friday effect; which is insufficient for drawing any conclusion. Furthermore, ANOVA suggests all the five models are insignificant because the F significance value for all models is higher than 0.05. Therefore the null hypothesis is accepted with the conclusion that the mean stock returns across all trading days of the week are not significantly different and Day-of-the-Week Effect not is present in Sub Period I (2004 – 2007). These Findings are consistent with Ahmed and Roser (1995), Husain (1999), Nishat and Mustafa (2002), Mahmood (2007), Ali and Akbar (2009). The results are shown in table 5.

Table 5: OLS Regression Results of Sub Period I						
Sub Period I (2004 – 2007)						
Monday Effect						
α	**β_2**	**β_3**	**β_4**	**β_5**	**F-Value**	**P-Value**
-0.036	-0.101	0.094	-0.038	-0.054	0.527	0.716
t - stat.	-0.99123	0.883836	-0.362	-0.46243	Test Insignificant	
Tuesday Effect						
α	**β_1**	**β_3**	**β_4**	**β_5**	**F Value**	**P Value**
0.0234	-0.053	0.033	0.079	-0.029	0.641	0.634
t - stat.	-0.9912	0.4297	1.0605	-0.347	Test Insignificant	
Wednesday Effect						
α	**β_1**	**β_2**	**β_4**	**β_5**	**F Value**	**P Value**
0.2814	0.045	0.031	-0.031	-0.054	0.382	0.822
t - stat.	0.884	0.430	-0.434	-0.671	Test Insignificant	
Thursday Effect						
α	**β_1**	**β_2**	**β_3**	**β_5**	**F Value**	**P Value**
0.099	-0.19	0.077	-0.033	-0.188	1.721	0.147
t - stat.	-0.362	1.060	-0.43399	-2.305*	Test Insignificant	
Friday Effect						
α	**β_1**	**β_2**	**β_3**	**β_4**	**F Value**	**P Value**
0.121	-0.022	-0.023	-0.045	-0.150	1.545	0.191
t - stat.	-0.46243	-0.34723	-0.67138	-2.30453*	Test Insignificant	

In Sub Period II, three significant β coefficients found in Monday and Tuesday effect; whereas, two in Wednesday, Thursday and Friday effect. Moreover, ANOVA recommends the F-values for all the five models found significant. This depicts the presence of Day-of-the-Week Effect. Therefore the null hypothesis has been rejected and it is concluded that the mean stock returns across all trading days of the week are significantly different and Day-of-the-Week Effect is present in Sub Period II (2008-2011). Further, there is conclusive evidence of significant negative Monday returns and positive Friday returns; since it shows lowest and highest significant mean returns on Monday and Friday respectively. It leads to the conclusion that Negative Monday and Positive Friday effect is present in KSE in Sub Period II (2008 – 2011). These results are consistent with the findings of Fields (1931), Cross (1973), French (1980) and with Haroon (2005). Whereas, sharply contrasts the study on Day-of-the-Week Effect in KSE by Ahmed and Roser (1995), Husain (2000), Nishat and Mustafa (2002), Mahmood (2007), by Basher and Sadorsky (2006), Ali and Akbar (2009), and Husain et al (2011). The results are vivid from table 6.

Table 6: OLS Regression Results of Sub Period II						
Sub Period II (2008 – 2011)						
Monday Effect						
α	**β_2**	**β_3**	**β_4**	**β_5**	**F Value**	**P Value**
-0.036	-0.101	0.094	-0.038	-0.054	0.527	0.716
t - stat.	-0.99123	0.883836	-0.362	-0.46243	Test Insignificant	
Tuesday Effect						
α	**β_1**	**β_3**	**β_4**	**β_5**	**F Value**	**P Value**
0.0234	-0.053	0.033	0.079	-0.029	0.641	0.634
t - stat.	-0.9912	0.4297	1.0605	-0.347	Test Insignificant	
Wednesday Effect						
α	**β_1**	**β_2**	**β_4**	**β_5**	**F Value**	**P Value**
0.2814	0.045	0.031	-0.031	-0.054	0.382	0.822
t - stat.	0.884	0.430	-0.434	-0.671	Test Insignificant	
Thursday Effect						
α	**β_1**	**β_2**	**β_3**	**β_5**	**F Value**	**P Value**
0.099	-0.19	0.077	-0.033	-0.188	1.721	0.147
t - stat.	-0.362	1.060	-0.43399	-2.305*	Test Insignificant	
Friday Effect						
α	**β_1**	**β_2**	**β_3**	**β_4**	**F Value**	**P Value**
0.121	-0.022	-0.023	-0.045	-0.150	1.545	0.191
t - stat.	-0.46243	-0.34723	-0.67138	-2.30453*	Test Insignificant	

9. Conclusion

This study proposed new methodology to find Day-of-the-Week Effect. Five OLS regression equations were built to find each Day-of-the-Week Effect as suggested by (Borges, 2009). We mainly focus on KSE-100 Index of Karachi Stock Exchange but the methodology possesses applicability in any stock market. The study found mixed results for both Sub Periods. Sub Period I (2004 – 2007) negates the prevalence of Day-of-the-Week Effect due to political instability. Moreover, study evidenced the presence of Day-of-the-Week Effect in Sub Period II. The argument to support this result might be that the period after election in 2008 - 2011 comprised of democracy and political stability in terms of government and fairly consistent policies.

OLS regression for Period II revealed a negative Monday and Positive Friday effect. These results are consistent with findings of Fields (1931), Cross (1973), French (1980). Finally, we conclude that investors can get more benefit by investment or withdrawal on Monday and Friday.

In future, research may be conducted on Individual securities as well as industry groups. Moreover, seasonality may also be tested by considering the volatility pattern in returns. Models for heteroscedasticity like ARCH, GARCH, T-GARCH and E-GARCH may be employed to find more significant results. Further researches must be conducted to find the impact of politics and other fundamental factors on anomalies in stock returns. I suggest that the institutions and brokers who provide financial services should include seasonal anomalies in their analysis.

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