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DAY OF THE WEEK EFFECT IN CONVENTIONAL AND ISLAMIC STOCK INDEXES

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Abstract:

In this study, existence of day of the week (DOW) effect is examined pre/post subprime crisis periods and in terms of conventional/Islamic of indexes. Canada, Indonesia, Japan, UK and USA markets are examined for a period of 2003-2014. The findings of the study showed significant DOW effect for all indexes, however such effect is not persistent. When DOW effect examined in terms of conventional and Islamic indexes of each market, there is not persistent conformity on the DOW effect for both indexes of the same markets.

Keywords: *Day of the Week Effect, Subprime Crisis, Islamic Indexes*

JEL Codes: *G10, G14 and G15*

1. Introduction

By 2007, increasing number of defaults in subprime credits hit the housing market and mortgage based financial instruments in United States, and then by 2008 subprime crisis turned out to be a global financial crisis. Several financial institutions were collapsed and severe downturns realized in global stock markets. As a consequence, recent financial crisis had a great impact on every fields of global economy, financial institutions and behavior of economic agents.

Financial crises, not only the recent global financial crisis but even local crises, have an impact on trading behavior of market participants. Some studies presented that the individuals' past experiences influence their risk taking and investment portfolio composition (Malmendier and Nagel, 2011); crisis periods changes future market risk and return expectations and hence change the risk taking behavior (Weber, et.al., 2013); crisis cause a temporary increase in expectations/uncertainty and long term increase in disagreement between market participants (Hudomiet, et.al., 2011); as a result of change in perceptions during crisis periods, trading and risk taking behavior are also subject to change (Hoffmann, et.al., 2013). Not only the individuals but also financial institutions effected from crises from different aspects such as banking regulations and risk taking (Calluzzoa and Dong, 2015), credit lines (Fratzscher, et.al., 2016), hedge funds trading (David, et.al., 2012).

Such impacts of financial crises on both individual and institutional investors may cause changes in their trading behavior and may cause some structural changes in financial markets; such that, one of the objectives of this study is to analyze the possible change in the market efficiency after subprime crisis. Although, there are several analysis or methods for measuring efficiency, the existence of the day of the week (hereafter, DOW) effect before, during and after the crisis period will be analyzed in this study.

The existence of day of the week effect have been reported in many studies from different aspects of developed markets, developing markets and different indexes. However, there is little for DOW effect anomaly for Islamic indexes. Hence, another objective of this study to analyze the existence of DOW effect for Islamic indexes and compare the findings with the conventional indexes for pre and post crisis periods.

In order to achieve the objectives mentioned above, indexes from 5 countries (United States of America, United Kingdom, Canada, Japan and Indonesia) were selected and both Islamic and conventional indexes of those markets

were analyzed in this study. The analyses are carried out for a period of 2003-2014. In order to investigate the possible effects of crisis, the data set divided in to three periods: 2003-2007, 2008-2009 and 2010-2014.

Remainder of this study is organized as follows; section two will present a summary of related literature on DOW effect; section three presents the data to be used in analyses and methodological details; section four will be the findings of the analyses, and hence last section is the conclusion.

2. Literature Review

As it is well known, efficient market hypothesis states that all available information is reflected to asset prices (Fama, 1970 and 1965), that no one can continuously earn abnormal profits. Such proposition of the efficient capital market hypothesis has been one of the most debated topics in finance arena. One aspect of the debates is concentrated on stock price anomalies such as value, size and calendar anomalies, which contradicts the validity of the market efficiency.

Among these anomalies the calendar anomalies have been at the center of the interest for both practitioners and academicians. The calendar anomalies are basically seasonal or reoccurring patterns in stock returns, which might be used to earn abnormal profit by market timing investment strategies. Among different calendar anomalies (like January effect, turn of the month effect, sell in May, holiday effect) the DOW effect appeals great attention of researchers.

The existence of DOW effect, which is significant daily return differences among week days, have been extensively documented in many studies from different aspects of developed markets, developing markets and different indexes. In this part of the study, the previous literature dealing with the DOW effect will be summarized for the countries, which are the sample of the below empirical analysis.

Although, earlier evidences about could be found for US market (as Cross, 1973), DOW effect appeal great attention by 1980s. French (1980) reported significant negative Monday return for S&P composite portfolio. Similar result was reported by Gibbons and Hess (1981) for Dow Jones 30 securities. Keim and Stambaugh (1984) analyzed S&P composite index returns and reported persistent lower returns for Monday and higher returns for last trading day of the week (Friday or Saturday). By the use of 90year data for DJIA, Lakonishok and Smidt (1988) reported similar results.

Not only the USA markets presented DOW effect but also some evidences were documented for international markets (for international studies the results of the countries, which are the sample of the below empirical analysis, will be summarized). One of the earliest studies in international arena was documented by Jaffe and Westerfield (1985), who investigate 5 developed markets. Although, USA, UK, and Canada presented negative Monday, Japan had the lowest return on Tuesday. A similar finding was documented by Condoyanni, et.al. (1987), who analyzed 7 markets, while USA, UK and Canadian markets presented negative Monday returns, negative Tuesday was documented for Japan for whole period of analysis. When the existence of DOW effect was considered for sub-periods, all countries had a significant negative Monday in some periods, Canada and USA had no significant negative Tuesday returns. Moreover, Board and Sutcliff (1988) reported DOW effect for UK market, however significance of the effect declines over time.

Although, earlier studies revealed the existence of DOW effect for several markets, most of the studies published by the end of 1980s contradicts former evidences. For example, Connolly (1989) stated that estimation and testing methodology effects the strength of DOW effect. Likewise, Chang, et.al. (1993) analyzed the robustness of DOW effect in 23 markets and reported that DOW effect was not significant for most markets after sample size and error term adjustments. Although, some markets presented significant DOW effect after adjustments, those effects were not strong across calendar. Similar findings were also reported by Dubois and Louvet (1996). Moreover, Marquering (2006) argued that effect of an anomaly was subject to decrease in two years following its publication. On the other

hand, Brusa, et.al. (2000) presented the reverse weekend effect, where returns were positive Monday for large firms and negative for small firms in four of the US indexes (DJIA, CRSP, S&P500 and NYSE). However, it should also be added that such reverse DOW effect was not valid for international markets (Brusa, et.al., 2003).

By 2000s several studies documented the decreasing importance of DOW effect in developed countries. Among those, Kohers, et.al. (2004) reported that although DOW effect was valid for 1980s for most of the developed stock markets (negative Monday for UK, USA and Canada; negative Tuesday for Japan), however by 1990s almost all DOW effect faded except Japan, which showed negative Monday. In a similar study, Cho, et.al. (2007) explored the DOW effect for Dow Jones Industrial Average (DJIA), S&P 500, NASDAQ, Russell 2000, FTSE 100, Nikkei 222 and CRSP indexes. They stressed that although DOW effect reversed or weakened for DJA and S&P 500 indexes after 1987, it was strong in Nasdaq, Russell 2000 and CRSP. On the other hand, Boudreaux, et.al, (2010) found that DOW effect was valid for only bear market for DJIA, S&P500 and Nasdaq. Similarly, finding also reported by Urquhart and McGroarty (2014), and they added the time varying behavior of DOW effect. Another study on US markets. Similarly, Olson, et.al., (2015) explore the DOW effect for seven US market indexes for a period of 1973-2013. They stated that the DOW effect was significantly smaller after 1976 and Monday returns became similar to other weekday returns. In a cross country analysis, Cinko, et.al. (2015) studied the existence of DOW effect for 24 indexes in 16 developed countries for a period of 1999-2013. No significant DOW effect could be found for US stock indexes (Dow Jones Inds. Average, Nasdaq100 and S&P500). However, significant negative Wednesday for UK stock indexes (FTSE All-Share and FTSE100) and positive Friday for Canadian S&P/TSX Composite index were reported.

Some other studies in literature compared the existence of DOW effect between developed and developing countries. Following Asian crisis, Ndu (2005) examined 10 developed and developing East Asian markets for 1998-2003 period. While Indonesian Jakarta Stock Exchange (JSE) exhibited negative Monday and Wednesday returns, Japan Nikkei225 index presented negative mean returns for all days except Tuesday. When maximum and minimum of index returns are analyzed JSE had maximum on Thursday and minimum on Monday; whereas Nikkie225 index presented maximum on Tuesday and minimum on Thursday. On the other hand, Hui (2005) considered six stock market indices (S&P 500 Composite, Nikkei 225, Hang Seng Index, Korea SE Composite, SES All-Share Index and Taiwan SE Weighted). The DOW effect was found in Singapore with low returns on Monday-Tuesday and high returns on Wednesday-Friday.

The evidences for emerging markets also presents mixed evidences. Choudhry (2000) analyzed the DOW effect for 7 Asian emerging countries for 1990-1995 period by using GARCH methodology. While some markets presented significant DOW effect, Indonesian Jakarta Composite Index presented significant negative returns for Monday but no significant day of the week reported for remaining weekdays. Contrary, Basher and Sadorsky (2006) studied 21 emerging countries for December 1992-October 2003 period. They utilized 5 different models to test the existence of DOW effect and results were subject to change under different models. Although, majority of the markets did not present DOW effect, some markets had strong DOW effect. For Indonesia, Tuesday effect was detected under only one model. However, Cinko, et.al. (2014) examined DOW effect for 13 developing countries for 12year period. Significant DOW effects was documented for all countries. Indonesian Jacarta Composite Index presented negative Monday and positive Wednesday, Thursday, Friday returns.

Although, the existence of DOW effects have been reported in many studies from different aspects of developed markets, developing markets and different indexes, there is little evidence on the existence of DOW effect anomaly for Islamic indexes. Among these, Abdullah, et.al. (2011) studied the existence of DOW effect on 3 indexes of Malaysian market (Kuala Lumpur Shariah Index-KLSI-, FBM Emas Shariah and FBM Hijrah Emas Shariah). The findings of the study presented significant negative Monday and positive Friday for KLSI, and no DOW effect for

other indexes. In a similar study, Lean and Tan (2010) explored the DOW effect in FTSE Bursa Malaysia index family including Shariah indexes for 2006-2008 period (2007-2008 for some indexes). The DOW effect could not be found for all indexes except MESDAQ index. Moreover, Wenhui, et.al., (2009) studied for 1999-2007 for FTSE Bursa Malaysia Hijrah Shariah Index and reported significant positive Friday return.

3. Data and Methodology

In order to explore the DOW effect per and post financial crisis and compare the differences in conventional and Islamic indexes, total of 10 indexes will be analyzed. The dataset of 10 indexes composed of 5 conventional and 5 Islamic indexes. As a result of data availability, the indexes from Canada, Japan, Indonesia, UK and USA stock markets are selected as samples. The indexes covered are given in Table 1.

Table 1
Indexes Data

Type	Index	Country	Symbol
Conventional	FTSE 100	UK	FTSE 100
	Jakarta Composite	Indonesia	JKSE
	Nikkei 225 Stock Average	Japan	Nikkei 225
	S&P 500 Composite	USA	S&P 500
	S&P/TSX Composite	Canada	S&P/TSX
Islamic	Dow Jones Islamic Market Canada	Canada	DJICN
	Dow Jones Islamic Market Japan	Japan	DJIJP
	Dow Jones Islamic Market U.S.	USA	DJIUS
	Dow Jones Islamic Market U.K.	UK	DJIUK
	Jakarta Islamic Index	Indonesia	JKII

In order to analyze possible effect of recent financial crisis the analyses are carried out for a period of 2003-2014. The data set divided in to three periods: 2003-2007, 2008-2009 and 2010-2014.

The daily closing prices of the indexes were used to calculate the returns of each index by the following formula:

$$r_{t,I} = ln\left({I_{t,i}}/{I_{t-1,i}}\right)$$

Where rt,I stands for the Ith index return at a specific time t; It, I and It-1, I are Ith index closing price for time t and t-1 respectively.

By following the previous literature, regression analyses conducted to explore possible DOW effect (French, 1980; Balaban, 1995). The regression model constructed with daily dummies and error term. The following equation presents the regression model utilized in the study:

$$r_{t,I} = \beta_1 DM + \beta_2 DT + \beta_3 DW + \beta_4 DTH + \beta_5 DF + e_I$$

Where, $r_{i,t}$ stands for I^{th} index return at time t; e_t is the random error term. Additionally, *DM, DT, DW, DTH, DF* are the dummy variables for Monday, Thursday, Wednesday, Thursday, and Friday, respectively.

The descriptive statistics of index returns for 10 indexes are given in Appendix I. For whole period of 2003-2014, while lowest standard deviation was realized in Canadian conventional index of S&P/TSX, the highest standards deviation is in Canadian Islamic index. Similar finding is valid for 2010-2014 period. For 2003-2007 period, Canadian S&P/TSX index has lowest and JKII (Indonesia Islamic) has highest standard deviation. For crisis period of 2007-2008, UK FTSE index has lowest and DJICN (Canadanian Islamic) has highest standard deviation. When standard deviations of conventional and Islamic indexes compared it is observed that conventional indexes have lower standard deviation than Islamıc counterparts for most of the sub-periods.

4. Empirical Findings

The impact of recent financial crisis on market efficiency and differences in conventional and Islamic indexes have been analyzed for 10 indexes from 5 countries. Overall results (coefficients and p values) of the analyses are presented in Appendix II.

Table 2
Sign of the coefficients for all indexes

Period	Return	Monday	Tuesday	Wednesday	Thursday	Friday
2003-2007	Pozitive	7	9	7	10	9
	Negative	3	1	3	0	1
2008-2009	Pozitive	2	6	4	3	4
	Negative	8	4	6	7	6
2010-2014	Pozitive	3	9	7	6	7
	Negative	7	1	3	4	3
2003-2014	Pozitive	0	7	3	10	6
	Negative	10	3	7	0	4

Table 2 summaries the daily coefficient of all returns for whole period and sub-periods. For whole period of 2003-2014 all of the indexes present negative return on Mondays and positive returns on Thursdays. For sub-period of 2003-2007 again positive Thursdays are observed for all markets, and positive Tuesday and Friday for 9 indexes. For this period, dominance of positive returns for all indexes is obvious. For crisis period of 2008-2009, majority of the index present positive Tuesday but rest of the week days have negative returns. For post crisis period of 2010-2014, the dominance of positive returns can be observed for all indexes except Monday.

Table 3 presents the indexes, which have significant DOW effect with their significance level. Although, for whole period of 2003-2014, all indexes have negative Monday and positive Thursday returns (see Table 2), only 3 of Monday returns are significant. Moreover, there are some significant Wednesday returns. Both of the Indonesian conventional (JKSE) and Islamic (JKII) indexes present the same return patterns (negative Monday, positive Wednesday and Friday returns). Similar return pattern can also be observed in UK conventional (FTSE100) and Islamic (DJIUK) indexes with negative Wednesday. On the other hand, while Canadian Islamic (DJICN) index presents negative Monday and positive Friday returns, no DOW effect can be observed in conventional counterpart. No significant return pattern can be detected for Tuesday and Thursdays.

Table 3
Findings for period of 2003-2014
+ or – signs represent positive or negative returns. 1%, 5% and 10% are the significance levels.

Index	Monday	Tuesday	Wednesday	Thursday	Friday
FTSE 100			-5%		
JKSE	-1%		+1%		+1%
DJICN	-10%				+10%
DJIUK			-5%		
JKII	-5%		+1%		+1%

The findings for pre-crisis period of 2003-2007 is presented in Table 4. No significant Monday and Thursday returns are found for this period. Moreover, there is no significant negative return for this period. Both of the Japanese (conventional and Islamic) and USA conventional indexes have no DOW effect. On the other hand, 6 indexes presented positive Friday returns, which are the conventional and Islamic indexes of UK (FTSE and DJIUK), Indonesia (JKSE and JKII), Canada (S&P/TSX and DJICAN). While, positive Tuesday returns are observed in Indonesian indexes, positive Wednesday return is valid for both of the Indonesian index and US Islamic (DJIUS) index.

Table 4
Findings for period of 2003-2007

Index	Monday	Tuesday	Wednesday	Thursday	Friday
FTSE 100					+5%
JKSE		+5%	+1%		+1%
S&P/TSX					+5%
DJICAN					+1%
DJIUS			+ 10%		
DJIUK					+5%
JKII		+5%	+5%		+1%

When the findings for crisis period of 2008-2009 is analyzed, no DOW effect can be observed except Canadian conventional (S&P/TSX) index. This finding possibly due to the high volatility during the period and the short analysis period.

The findings for post crisis period of 2010-2014 is presented in Table 5. No DOW effect is valid for Thursday and Friday in any index. In 4 index, there is significant Monday returns. While both indexes (S&P500 and DJIUS) of US have positive Monday, Indonesian indexes (JKSE and JKII) have negative Monday returns. The conventional UK (FTSE) and Canadian (S&P/TSX) indexes presented positive Tuesday return. Hence, positive Wednesday returns are valid for Indonesian indexes (JKSE and JKII) and conventional Japanese (Nikkei 225) index.

Table 5
Findings for period of 2010-2014

Index	Monday	Tuesday	Wednesday	Thursday	Friday
FTSE 100		+5%			
JKSE	-10%		+1%		
Nikkei 225			+10%		
S&P 500	+5%				
S&P/TSX		+5%			
DJICN	-10%				
DJIUS	+5%				
JKII	-10%		+1%		

The tables 3-4-5 presented the findings of the study, however such findings need interpretation in terms of effect of the recent global crisis and the different DOW effects explored in conventional and Islamic indexes. Table 6 summaries the significant findings of the study both in terms of type of the index (conventional and Islamic) on country bases and in terms of period of analysis.

Table 6
DOW Effect comparison with respect to index type and crisis period
M: Monday, T: Tuesday, W: Wednesday, F: Friday.

Country	Index Type	2003-2007	2008-2009	2010-2014	2003-2014
Canada	Conventional	+F	-M	+T	
	Islamic	+F		-M	-M, +F
Indonesia	Conventional	+T, +W, +F		-M, +W	-M, +W, +F
	Islamic	+T, +W, +F		-M, +W	-M, +W, +F
Japan	Conventional			+W	
	Islamic				
UK	Conventional	+F		+T	-W
	Islamic	+F			-W
USA	Conventional			+M	
	Islamic	+W		+M	

Table 6 demonstrates divergence of weekdays with respect to sample period, while traditional DOW effect (negative Monday and positive Friday) can be observed for Canadian Islamic index and both of Indonesian indexes for full sample of 2003-2014, no DOW effect can be observed for Japan and USA. When sub-periods are examined, divergence in weekdays quite clear. For pre-crisis period, no significant Monday return is existing. However, positive

Friday is observed for Canada, Indonesia and UK markets When post-crisis period is examined, Friday effect disappears but mixed Monday effect is observed for 3 markets. No significant DOW effect is found for crisis period except Canada.

Such finding is consistent with the literate that documented the changing patterns in weekdays, like declining, reversal and disappearance (Olson, et.al., 2015; Urquhart and McGroarty, 2014; Boudreaux, et.al, 2010; Basher and Sadorsky, 2006; Kohers, et.al., 2004). The proposition by Doyle and Chen (2009), who stated that weekday effect is in state of flux and changes overtime, try to explain such changing pattern as "wandering weekday effect". On the other hand, Olson, et.al. (2015) stated that such changing patterns in weekdays is a long-term adjustment of the market before disappearance of DOW effect.

When Table 6 is explored according to index type, Indonesian indexes presented the same DOW effect for each period under investigation. However, it should be noted that as an emerging market, such finding may be due to the limited market efficiency. For developed markets, results are not persistent. While Canada and UK indexes demonstrated positive Fridays for both type of indexes in pre-crisis period; both indexes of USA have positive Monday return for post-crisis period. For whole sample of 2003-2014, both UK indexes have negative Monday. For the remaining periods and markets, there is either no DOW effect or different effect is present. So, it is not possible assert that conditional and Islamic indexes of a market present similar DOW effect.

Although, it is not possible interpret such finding directly with analysis above, it should be noted that especially for the developed markets, Islamic indexes composed of relatively small companies with respect to conventional indexes. Kamara (1997) and Mehdian and Perry (2001) uncover the evidences on the differences of DOW effect for large and small companies.

5. Conclusion

Day of the week (DOW) effect is one of the most researched topic in finance. In this study, DOW effect is examined under two aspects: first, the existence of DOW effect pre and post crisis periods; second, the existence of DOW effect under conventional and Islamic of indexes. The analyses cover a period of 2003-2014 with three sub-periods. Conventional and Islamic indexes of Canada, Indonesia, Japan, UK and USA markets are examined.

The findings of the study showed significant DOW effects for each index, however such effect is not persistent. The divergence of DOW effect for different periods can be explained by "wandering weekend effect". On the other hand, when DOW effect examined in terms of conventional and Islamic indexes, there is no conformity of the DOW effect for conventional and Islamic index of a market. While, some markets presented similar DOW effect in some periods, such similarity is subject to disappear in another period.

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Appendixes

Appendix 1: Summary Statistics

Period		S&P500	JKSE	FTSE 100	NIKKEI 225	S&P/TSX
2003-2014	Mean	0,000272	0,000802	0,000163	0,000227	0,000254
	Std. Dev.	0,012113	0,013773	0,011607	0,014894	0,010995
	Max	-0,0947	-0,10954	-0,09266	-0,12111	-0,09788
	Min	0,109572	0,076231	0,093843	0,132346	0,093703
		DJIUS	**JKII**	**DJIUK**	**DJIJP**	**DJICN**
	Mean	0,000322	0,000744	0,000191	0,000136	0,000298
	Std. Dev.	0,011679	0,016101	0,014329	0,013405	0,017545
	Max	-0,09697	-0,13857	-0,09569	-0,09549	-0,13769
	Min	0,117399	0,087555	0,116762	0,106579	0,118689
		S&P500	**JKSE**	**FTSE 100**	**NIKKEI 225**	**S&P/TSX**
2003-2007	Mean	0,000393	0,001432	0,000379	0,000444	0,000566
	Std. Dev.	0,008188	0,012697	0,008862	0,011541	0,007342
	Min	-0,03587	-0,078	-0,04918	-0,0557	-0,0358
	Max	0,034814	0,067338	0,059026	0,036031	0,023725
		DJIUS	**JKII**	**DJIUK**	**DJIJP**	**DJICN**
	Mean	0,00045	0,001528	0,000588	0,000352	0,001008

	Std. Dev.	0,008425	0,015088	0,010245	0,011841	0,012818
	Min	-0,03593	-0,10038	-0,05083	-0,06167	-0,07913
	Max	0,035474	0,075824	0,049083	0,046646	0,044106
		S&P500	**JKSE**	**FTSE 100**	**NIKKEI 225**	**S&P/TSX**
2008-2009	Mean	-0,00053	-0,00015	-0,00034	-0,00071	-0,00031
	Std. Dev.	0,021586	0,020046	0,019391	0,023369	0,02068
	Min	-0,0947	-0,10954	-0,09266	-0,12111	-0,09788
	Max	0,109572	0,076231	0,093843	0,132346	0,093703
		DJIUS	**JKII**	**DJIUK**	**DJIJP**	**DJICN**
	Mean	-0,00033	-0,00032	-0,00045	-0,00049	-0,00038
	Std. Dev.	0,019815	0,0229	0,023693	0,020158	0,031333
	Min	-0,09697	-0,13857	-0,09569	-0,09549	-0,13769
	Max	0,117399	0,078629	0,116762	0,106579	0,118689

Appendix 1: Summary Statistics (Cont.)

Period		**S&P500**	**JKSE**	**FTSE 100**	**NIKKEI 225**	**S&P/TSX**
2010-2014	Mean	0,00047	0,000555	0,000148	0,000386	0,000168
	Std. Dev.	0,009917	0,011518	0,009709	0,013432	0,008055
	Min	-0,06896	-0,093	-0,04779	-0,11153	-0,04123
	Max	0,046317	0,070136	0,050322	0,055223	0,03941
		DJIUS	**JKII**	**DJIUK**	**DJIJP**	**DJICN**
	Mean	0,000455	0,000387	5,34E-05	0,00017	-0,00014
	Std. Dev.	0,009956	0,013558	0,012765	0,011331	0,013449
	Min	-0,06412	-0,09906	-0,07223	-0,06836	-0,07897
	Max	0,045858	0,087555	0,058477	0,067542	0,05993

Appendix 2: Statistical Findings

S&P 500	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	.020	.725	.468	-.035	-.803	.422	.003	.095	.924	-.006	-.382	.703
Tuesday	.028	1.021	.307	.036	.810	.418	.054	1.961	**.050**	.020	1.253	.210
Wednesday	.043	1.548	.122	-.045	-1.037	.300	.008	.285	.776	-.004	-.241	.810
Thursday	.011	.398	.691	-.001	-.015	.988	.023	.819	.413	.014	.897	.370
Friday	.005	.179	.858	-.009	-.202	.840	.018	.667	.505	-.009	-.570	.568
DJIUS	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**

Monday	.014	.504	.615	-.021	-.470	.639	.005	.179	.858	-.008	-.493	.622
Tuesday	.032	1.159	.246	.032	.732	.465	.061	2.186	**.029**	.015	.965	.334
Wednesday	.051	1.830	**.068**	-.046	-1.043	.298	.007	.236	.814	-.002	-.097	.923
Thursday	.022	.812	.417	.004	.098	.922	.013	.476	.634	.017	1.092	.275
Friday	.000	.007	.995	-.007	-.166	.868	.017	.610	.542	-.009	-.560	.575
JKSE	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	-.017	-.627	.531	-.034	-.768	.443	-.052	-1.896	**.058**	-.046	-2.848	**.004**
Tuesday	.065	2.375	**.018**	-.031	-.718	.473	.029	1.052	.293	.023	1.434	.152
Wednesday	.076	2.775	**.006**	.004	.082	.934	.121	4.403	**.000**	.058	3.557	**.000**
Thursday	.037	1.336	.182	.003	.071	.944	-.004	-.142	.887	.015	.908	.364
Friday	.090	3.266	**.001**	.041	.945	.345	.014	.498	.619	.051	3.132	**.002**
JKII	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	-.011	-.397	.692	-.019	-.423	.673	-.048	-1.749	**.081**	-.039	-2.392	**.017**
Tuesday	.066	2.395	**.017**	-.029	-.654	.514	.020	.721	.471	.019	1.196	.232
Wednesday	.067	2.448	**.015**	-.020	-.460	.646	.116	4.215	**.000**	.050	3.097	**.002**
Thursday	.010	.349	.727	-.007	-.156	.876	-.021	-.755	.450	.003	.197	.844
Friday	.094	3.401	**.001**	.043	.985	.325	-.003	-.115	.909	.043	2.668	**.008**

Appendix 2: Statistical Findings (Cont.)

FTSE100	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	.009	.332	.740	.025	.573	.567	-.011	-.412	.680	-.004	-.248	.804
Tuesday	-.002	-.087	.931	.025	.568	.570	.060	2.169	**.030**	.014	.884	.377
Wednesday	-.002	-.065	.948	-.037	-.837	.403	-.029	-1.048	.295	-.034	-2.099	**.036**
Thursday	.025	.908	.364	-.047	-1.061	.289	.013	.477	.634	.005	.291	.771
Friday	.065	2.364	**.018**	-.006	-.128	.898	.001	.048	.962	.016	1.014	.311
DJIUK	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	-.002	-.081	.936	.012	.274	.784	-.003	-.116	.907	-.009	-.579	.563
Tuesday	.020	.717	.473	.031	.703	.482	.030	1.085	.278	.013	.844	.399
Wednesday	.008	.288	.774	-.051	-1.158	.247	-.015	-.553	.580	-.033	-2.095	**.036**
Thursday	.045	1.626	.104	-.026	-.603	.547	.003	.092	.927	.010	.632	.528
Friday	.058	2.080	**.038**	-.008	-.190	.849	-.005	-.170	.865	.014	.866	.386
Nikkei225	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	.028	1.018	.309	-.016	-.372	.710	-.003	-.091	.927	-.008	-.514	.607
Tuesday	.012	.451	.652	-.007	-.151	.880	-.012	-.436	.663	-.006	-.354	.723
Wednesday	-.011	-.407	.684	.018	.400	.689	.048	1.723	**.085**	.006	.385	.700
Thursday	.034	1.239	.215	-.017	-.398	.691	.018	.647	.518	.007	.442	.659
Friday	.022	.804	.421	-.046	-1.037	.300	.013	.479	.632	-.002	-.150	.880
DJIJP	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	.025	.891	.373	-.015	-.338	.736	.010	.351	.725	-.012	-.720	.471
Tuesday	.010	.371	.710	-.023	-.534	.593	.008	.271	.786	-.001	-.042	.967
Wednesday	-.020	-.710	.478	.046	1.059	.290	.010	.346	.729	-.007	-.436	.663
Thursday	.032	1.141	.254	-.011	-.251	.802	.010	.372	.710	.009	.538	.590
Friday	.019	.702	.483	-.051	-1.170	.243	-.004	-.131	.896	-.009	-.590	.555
S&P/TSX	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		

	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	.040	1.437	.151	-.085	-1.932	**.054**	-.034	-1.238	.216	-.013	-.806	.420
Tuesday	.022	.805	.421	.032	.737	.461	.060	2.158	**.031**	.013	.833	.405
Wednesday	.028	1.026	.305	-.014	-.322	.748	.009	.323	.747	-.009	-.551	.582
Thursday	.021	.745	.457	.009	.217	.828	.000	.011	.992	.014	.883	.377
Friday	.061	2.206	**.028**	.023	.521	.602	.012	.437	.662	.022	1.367	.172
DJICAN	**2003-2007**			**2008-2009**			**2010-2014**			**2003-2014**		
	Beta	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**	**Beta**	**t**	**Sig.**
Monday	.003	.119	.905	-.060	-1.368	.172	-.050	-1.794	**.073**	-.028	-1.776	**.076**
Tuesday	.009	.315	.753	.021	.478	.633	.029	1.037	.300	-.001	-.043	.966
Wednesday	.040	1.433	.152	.004	.095	.924	-.004	-.141	.888	-.009	-.563	.573
Thursday	.033	1.209	.227	-.004	-.101	.919	.000	.006	.995	.010	.624	.533
Friday	.090	3.268	**.001**	.012	.273	.785	.002	.058	.954	.028	1.743	**.081**