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# The Evidence of The Day of The Week Effect (Dow) on Islamic Stock Market Return in Relation to Calendar Anomalies

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## Abstract

This study aims to examine the impact of calendar anomalies, specifically the day of the week effect (DOW), on the returns of 10 Islamic stock markets over a 20-year period spanning from September 25, 2000, to September 24, 2020. The authors employed the generalized autoregressive conditional heteroskedasticity (GARCH) model to analyze the data, and the exponential generalized autoregressive conditional heteroskedasticity (EGARCH) model was used as a robustness test. The findings indicated that the day-of-the-week effect had a significant influence on the returns of DJIM, Indonesia, and Pakistan's Islamic stock markets. This research contributes to the existing literature on Islamic stock markets by comprehensively understanding their potential behavior in response to calendar anomalies. Furthermore, it offers valuable insights for investors seeking to diversify their portfolios by investing in various sectors of Islamic stock markets.

**Keywords:** Calendar Anomalies, Day of the Week Effect, GARCH, EMH, Islamic Stock Market, Behavior Finance.

## Introduction

In recent years, Islam has experienced significant growth as a religion, leading to an increased demand for Islamic financial products. This surge in demand can be attributed to the fact that conventional financial products do not adhere to the religious convictions of Muslim investors. Consequently, devout Muslims perceive the current form of stock markets as limiting their ability to invest, as many stocks fail to comply with Shariah's parameters. As a result, there has been a notable focus on Islamic finance in recent decades.

However, empirical research has indicated that Islamic stock indices exhibit higher levels of volatility compared to their conventional counterparts and are not completely immune to global financial crises. In terms of informational efficiency, Ben Rejeb and Arfaoui (2019) demonstrated that Islamic stock indices are more efficient than conventional stock indices. Given the importance of informational efficiency, investors need to assess the risk and profitability of their investments in an efficient market.

Calendar anomalies have long captured the interest of economists, as they challenge the Efficient Market Hypothesis (EMH). These anomalies, which defy the EMH, have been the subject of numerous empirical studies. However, the empirical results on calendar anomalies

remain mixed due to variations in data collection, data frequency, data period, and methodologies employed. Moreover, these studies have examined different types of markets, financial assets, and stock market countries. The existence of calendar anomalies undermines a weak version of the EMH, which posits that stock returns are time-invariant and, therefore, implies the absence of short-term seasonal patterns in stock returns. Seasonal trends in stock returns indicate market inefficiency and suggest that investors have the potential to achieve above-average returns. By identifying patterns in volatility, investors can make more informed investment decisions, considering both returns and risks.

Hence, the objective of this study is to investigate the presence of a well-known calendar anomaly, namely the day of the week effect, on returns in Islamic stock markets. The analysis employs the Generalized AutoRegressive Conditional Heteroskedasticity (GARCH) model and conducts a robustness test using the Exponential Generalized AutoRegressive Conditional Heteroskedasticity (EGARCH) model. The study focuses on the returns of 10 Islamic stock markets over a 20-year period from September 2000 to September 2020. The Dow Jones Islamic Market (DJIM) serves as a benchmark for nine stock markets, including Saudi Arabia, Malaysia, the United Arab Emirates (UAE), Kuwait, Qatar, Turkey, Indonesia, Bahrain, and Pakistan.

### Literature Reviews

Calendar anomalies have been a subject of extensive research in the field of finance and have attracted significant attention from economists and scholars. These anomalies challenge the Efficient Market Hypothesis (EMH), which asserts that stock prices fully reflect all available information and follow a random walk pattern. The presence of calendar anomalies suggests that markets may not be entirely efficient, and investors can potentially exploit predictable patterns to achieve abnormal returns. Fama (1970) made a significant contribution to operationalising the concept of market efficiency in a classic study. The efficient market hypothesis (EMH) has been a popular topic in finance and mainstream economics since the late 1950s and early 1960s when it was known as the “theory of random walks” in finance and “rational expectations theory” in mainstream economics. According to the hypothesis, efficient markets take a random walk, and past data cannot be used to forecast future stock prices.

Yalçın (2010), on the other hand, claimed that irrational investment activity and limited market arbitrage opportunities generate market anomalies that contradict the EMH. The day-of-the-week effect is one of the most widely documented calendar anomalies, according to which assets returns are significantly higher on some days of the week than on other days. The empirical literature for this anomaly includes, for example the day-of-the week effect is present on South African stock market indices (Du Toit et al., 2018). Gharaibeh and Hammadi (2013) investigated the existence and conditional nature of the DOW anomaly, which is one of the most well-known anomalies. Yatiwella (2011) explored the existence of calendar anomalies in Colombo Stock Exchange (CSE) from 1985 to 2005. The regression results implied that stock returns in the CSE during the 1995–2005 period were not entirely consistent with the random walk hypothesis. Singh (2014) looked into how common stock market anomalies were in four developing stock markets. The analysis verified the DOW and MOY of the EMH for Brazil, Russia, and India. Despite there being no anomaly in the MOY form, a statistically significant negative return was discovered for the Chinese stock market on Tuesday. This result implies that a trader could profitably enter the stock market a day early by using information on unexpected returns. Plastun et al (2019) explored the evolution of CA in the

US stock market, focusing on the DOW effect, TOM effect, turn-of-the-year (TOY) effect, and the holiday effect. The findings revealed that the 'golden period' of calendar anomalies occurred around the turn of the twentieth century.

Since the 1980s, however, all calendar anomalies had vanished, thus supporting the EMH. Although academic financial economists generally embrace the efficient market concept, evidence opposing it has emerged in recent years. The DOW, monthly, and holiday effects in the stock markets have been investigated with mixed conclusions. This anomaly still appears to exist in many emerging markets Caporale and Plastun (2017); Khan et al (2021), Kuala Lumpur Composite Index (KLCI) (Lim et al., 2010; Muhammad and Rahman, 2010), ASEAN-five stock markets of Indonesia, Malaysia, the Philippines, Singapore, and Thailand (Lim and Chia 2010), Saudi Stock Exchange Farooq et al (2013) and Thailand Stock Exchange (Sutheebanjard and Premchaiswadi, 2010). Moreover, day of the week effect not only exist in equity stock market but also on Bitcoin Kurihara and Fukushima (2017); Aharon and Qadan (2018); Ma et al (2019), cyptocurrencies Caporale et al (2019) and commodities (Qadan and Idilbi-baya, 2021). Overall, the day of the week effect can have an impact on investors' decision-making when it comes to portfolio selection, profit management, and overall investing strategy, according to (Zhang et al., 2017).

One of the most well-known calendar anomalies is the day of the week effect, which suggests that stock returns exhibit systematic patterns depending on the day of the week. Several studies have investigated this phenomenon in various financial markets worldwide, including conventional stock markets. However, limited research has been conducted on the day of the week effect in the context of Islamic stock markets.

Islamic finance has gained considerable momentum in recent decades, driven by the increasing demand for financial products that adhere to Islamic principles and values. Islamic stock markets have emerged as key components of the Islamic financial system, providing investment opportunities for Muslim investors. However, the unique characteristics of Islamic stock markets, such as compliance with Shariah parameters, raise questions about the presence of calendar anomalies and their implications for investors.

Empirical studies on the efficiency of Islamic stock markets have produced mixed findings. Ben Rejeb and Arfaoui (2019) conducted an analysis of informational efficiency and found that Islamic stock indices tend to be more efficient compared to their conventional counterparts. This suggests that market participants in Islamic stock markets may incorporate available information more effectively, leading to a higher level of efficiency.

On the other hand, studies have also shown that Islamic stock indices exhibit higher volatility compared to conventional stock indices. This higher volatility can be attributed to various factors, including the limited diversification opportunities available within Islamic stock markets and the potential impact of external factors on these markets. It remains an open question whether the day of the week effect plays a significant role in the volatility of Islamic stock markets.

The few existing studies that have examined the day of the week effect in Islamic stock markets have provided some initial insights. For instance, previous research conducted by Ahmed and Ali (2017) focused on the Pakistani stock market and found evidence of the day of the week effect, with lower returns observed on Mondays and higher returns on Thursdays. Similarly, another study by Khan and Abbas (2018) analyzed the Malaysian stock market and identified a significant day of the week effect, with Monday exhibiting lower returns and Friday exhibiting higher returns.

However, there is still a lack of comprehensive research on the day of the week effect in a

broader set of Islamic stock markets. This study aims to fill this gap by examining the presence of the day of the week effect in 10 prominent Islamic stock markets, including Saudi Arabia, Malaysia, the United Arab Emirates (UAE), Kuwait, Qatar, Turkey, Indonesia, Bahrain, and Pakistan. By using the Generalized AutoRegressive Conditional Heteroskedasticity (GARCH) model and conducting a robustness test using the Exponential Generalized AutoRegressive Conditional Heteroskedasticity (EGARCH) model, this research aims to provide a thorough understanding of the day of the week effect in Islamic stock markets.

Understanding the presence and extent of the day of the week effect in Islamic stock markets is crucial for both researchers and investors. It can shed light on the efficiency and predictability of these markets, as well as guide investment decisions. By identifying patterns and trends associated with specific days of the week, investors can potentially devise trading strategies that exploit these anomalies to achieve superior returns.

Overall, the literature on calendar anomalies in Islamic stock markets is still limited, and more research is needed to comprehensively examine the day of the week effect and other calendar anomalies in these markets. This study aims to contribute to the existing literature by providing valuable insights and implications for investors, market regulators, and policymakers operating in the realm of Islamic finance.

### **Research Methodology**

This study employs a quantitative research approach to investigate the presence of the day of the week effect on Islamic stock market returns. The research methodology consists of several key components, including data collection, sample selection, variables, and statistical analysis techniques. The data for this study is obtained from reliable and reputable sources. Daily stock market returns for the selected Islamic stock markets are collected for a 20-year period, spanning from September 25, 2000, to September 24, 2020. The Dow Jones Islamic Market (DJIM) is used as a benchmark for nine stock markets, namely Saudi Arabia, Malaysia, the United Arab Emirates (UAE), Kuwait, Qatar, Turkey, Indonesia, Bahrain, and Pakistan. These markets are chosen due to their significance in the Islamic finance industry and the availability of reliable data.

The selection of the sample is crucial to ensure the representativeness of the data. In this study, the sample includes 10 Islamic stock markets, and the focus is on the overall market returns rather than specific companies or sectors. By examining the entire market returns, a comprehensive analysis of the day of the week effect can be conducted. The main variable of interest in this study is the day of the week effect on stock market returns. The daily stock market returns for each Islamic stock market are regressed on dummy variables representing each day of the trading week. These dummy variables allow for the identification of any systematic patterns or anomalies associated with specific days of the week.

To analyze the data and investigate the presence of the day of the week effect, the Generalized AutoRegressive Conditional Heteroskedasticity (GARCH) model is employed. The GARCH model allows for the examination of volatility patterns in stock returns and captures the time-varying nature of volatility. This model is suitable for capturing potential day of the week effects, as it can account for heteroskedasticity and time-varying volatility. In 1986, Bollerslev and Taylor made modifications to the ARCH model, resulting in a more comprehensive version known as GARCH. GARCH models express the variance of residuals as a combination of two components: the ARCH term, which is a moving-average polynomial of order  $q$  based on past residuals, and the GARCH term, which is an autoregressive polynomial of order  $p$  based on past variances. According to Alexander (2001), the conditional variance



equation of the GARCH model can be considered an autoregressive process. In its simplest form, the conditional variance of the GARCH model can be represented by the following equation:

The GARCH (1,1) model, as referred to by Bollerslev and Taylor in 1988, includes these equations. Equation 3.1 demonstrates that the conditional variance of the asset (j) is a linear function of lagged squared error term and the lagged conditional variance of the asset (j). The coefficient illustrates the impact of price shocks in the asset (j) on the current conditional volatility of asset (j). The coefficient represents the influence of past conditional volatility of asset (j) on its current volatility. Similar to the ARCH model, the GARCH model places a non-negativity constraint on the estimated coefficient of the conditional variance. Equation 3.2 shows the constraints in which the coefficient should be greater than 0, and coefficients should be greater than or equal to 0.

$$\sigma_{j,t}^2 = \alpha_0 + \alpha_1 \varepsilon_{j,t-1}^2 + \beta_1 \sigma_{j,t-1}^2$$

$$\sigma_{j,t}^2 = \alpha_1 \varepsilon_{j,t-1}^2$$

The daily closing prices of the stock indices were collected as data for this study. The daily closing prices and daily settlement prices data were transformed into continuously compounded returns by using the following formula:

$$r_t = \ln\left(\frac{P_t}{P_{t-1}}\right) \times 100$$

According to equation 3.3, the return at time  $t$ , or  $rt$ , is equal to the difference between the closing price at time  $t$  and the closing price at time  $t$  minus one logarithmically. Because it is unit less, the continuous compounded return was chosen because it makes it simple to compare returns throughout the market (Brook, 2008). The DOW effect in this study has five dummy variables for the daily data. With the exception of the weekend, when the stock market is closed, this strategy provides a 5-day sample for every week (Chatzitzisi et al., 2021; Kumar and Pathak, 2016; Osazee, 2014). Monday is the benchmark while four dummy variables are defined as follows:  $D1_t = 1$  on Monday,  $D1_t = 0$  otherwise.

$$r_t = \gamma_1 D1_t + \gamma_2 D2_t + \gamma_3 D3_t + \gamma_4 D4_t + \gamma_5 D5_t + \mu_t$$

where  $rt$  represents the return at time  $t$  for each country that was studied independently,  $D1t$  stands for Monday, a dummy variable that takes the value of 1 for all Monday observations and 0 otherwise, and so on. The average sample return for each day of the week can be inferred from the coefficient estimations. Dummy variables, according to Brooks (2002), can be used to test other calendar anomalies, such as the month effect and the holiday effect, and they can be included in a given regression at varied frequencies.

Furthermore, to ensure the robustness of the findings, an additional statistical analysis technique, the Exponential Generalized AutoRegressive Conditional Heteroskedasticity (EGARCH) model, is utilized as a robustness test. The EGARCH model extends the GARCH model by capturing asymmetrical effects of volatility, which can be particularly relevant in capturing potential day of the week effects.

The statistical analysis involves estimating the regression models and assessing the significance of the day of the week dummy variables. The coefficients and p-values of these dummy variables indicate whether specific days of the week exhibit abnormal returns or patterns that deviate from the efficient market hypothesis.

To further validate the findings, various diagnostic tests will be conducted. These tests may include testing for serial correlation, heteroskedasticity, and model adequacy. By conducting these tests, the reliability and robustness of the results can be assessed. The EGARCH model was proposed by Nelson (1991) to overcome the weakness in GARCH when handling financial time series. In addition, it allows for asymmetric effects between positive and negative asset returns. The EGARCH model differs from the standard GARCH model in two key ways: (i) it allows positive and negative news to affect volatility differently, whereas the standard GARCH model does not; and (ii) it allows big news to affect volatility more than the standard GARCH model. There are several ways to express the EGARCH (1,1) model:

$$\sigma_{j,t}^2 = \exp[\alpha_0 + \alpha_1 f_j(Z_{j,t-1}) + \delta_j \ln(\alpha_{j,t-1}^2)]$$

$$f_j(Z_{j,t-1}) = (|Z_{j,t-1}| - E(|Z_{j,t-1}|) + \gamma_j Z_{j,t-1})$$

The conditional variance of asset j is depicted in equation 3.5 as an exponential function of its own standardised innovation. The coefficient depicts how lagged conditional variance affects the asset j's current conditional volatility. Coefficient displays the market's continued volatility. Furthermore, coefficient shows the asymmetries in the impact on the volatility of the asset j. A statistically significant negative value indicates that the conditional volatility is more affected by bad news than by good news. However, a strong positive indicates that volatility is higher in a bullish than a bearish market.

### Findings and Discussions

Table 4.1

*Descriptive Statistics of Daily Stock Return for Countries from 25 September 2000 to 24 September 2020*

	BAHRAI N	DJIM	INDONES IA	KUWAI T	MALAYSI A	PAKISTA N	QATAR	SAUDI ARABI A	TURKE Y	UAE
Mean	-0.0265	0.015	0.0419	-	0.0248	0.0188	0.0203	0.0066	0.0070	0.0046
Maximum	5.4726	9.432	12.0136	9.4311	13.2108	8.3578	12.492	9.4061	18.627	17.667
Minimum	-4.2648	8.932	-14.1930	20.425	-10.9537	11.3475	16.785	11.607	19.926	18.467
Std. Dev.	0.9188	0.985	1.5218	1.5787	0.8491	1.5906	1.5933	1.2085	2.1510	1.7753
Skewness	0.2038	0.246	-0.6513	1.5115	-0.2291	-0.3749	0.6637	1.2083	0.5391	0.5114
Kurtosis	6.7429	14.21	12.3578	20.400	32.8743	6.5226	17.649	20.818	11.693	18.116
Observations	1230	5551	4865	2751	4248	2676	2830	4391	3127	3423

Table 4.2

*Results for the day of the week effect*

No.	INDEX	Days	Monday (D1)	Tuesday (D2)	Wednesday (D3)	Thursday (D4)	Friday (D5)
1	Dow Jones Islamic Market World Index	Monday, Tuesday, Wednesday, Friday	0.0698***	0.0599***	0.0692***	0.01723	0.0376**
2	Dow Jones Islamic Market Malaysia Titans 25 Index	Tuesday, Friday	0.0131	0.0442**	0.0309	0.0267	0.0355*
3	Jakarta Islamic Index	Monday, Tuesday, Wednesday, Friday	-0.0775**	0.0854**	0.1490***	0.0215	0.1509***
4	S&P Saudi Arabia Shariah Index	Wednesday, Thursday	-0.0275	0.0146	0.0549**	0.0880***	-0.0546
5	FTSE NASDAQ Dubai Kuwait 15 Shariah Index	Monday, Tuesday	-	0.1291***	0.0599	-0.0012	-0.4800
6	FTSE NASDAQ Dubai UAE 20 Index	Wednesday, Thursday, Friday	0.0278	-0.0217	0.1146***	0.1551***	-0.5969***
7	FTSE NASDAQ Dubai Qatar 10 Shariah Index	Wednesday, Thursday	0.0298	0.0397	0.0849**	0.087**	NA

Table 4.3

*Results robustness test for the day of the week effect*

No.	INDEX	GARCH	EGARCH
1	Dow Jones Islamic Market World Index	Monday, Wednesday, Friday	Tuesday, Monday, Wednesday
2	Dow Jones Islamic Market Malaysia Titans 25 Index	Tuesday, Friday	Tuesday, Friday
3	Jakarta Islamic Index	Monday, Wednesday, Friday	Tuesday, Monday, Wednesday, Friday
4	S&P Saudi Arabia Shariah Index	Wednesday, Thursday	Monday, Thursday
5	FTSE NASDAQ Dubai Kuwait 15 Shariah Index	Monday, Tuesday	Monday, Tuesday
6	FTSE NASDAQ Dubai UAE 20 Index	Wednesday, Thursday, Friday	Wednesday, Thursday, Friday
7	FTSE NASDAQ Dubai Qatar 10 Shariah Index	Wednesday, Thursday	-
8	FTSE Turkey Shariah Index	Thursday	Thursday
9	Bahrain Islamic Index	Wednesday	Wednesday
10	FTSE Pakistan Shariah Index	Monday, Wednesday, Friday	Tuesday, Monday, Wednesday, Friday

Islamic stock markets in Indonesia exhibited the highest level of activity and profitability during the study period, with an average daily return of 4.2%. Malaysia, Qatar, Pakistan, DJIM, and Saudi Arabia followed with average daily returns of 2.5%, 2%, 1.55%, and 0.5% respectively. Conversely, Bahrain, Kuwait, and Turkey experienced negative average daily returns. All countries, except Bahrain, demonstrated positive median returns, with Bahrain showing a negative median return of -0.53%. The Turkish Islamic stock market exhibited the highest standard deviation (2.1510), while the Malaysian Islamic market had the lowest standard deviation (0.8491).

Table 4.2 provides a summary of the day of the week (DOW) effects observed in the study. The Monday effect (D1) was significant in the DJIM World Index and FTSE NASDAQ Dubai Kuwait 15 Shariah Index at the 1% level of significance. The Jakarta Islamic Index and FTSE Pakistan Shariah Index also exhibited a significant Monday effect at the 5% and 10% levels of significance, respectively. According to the Monday effect theory, stock market returns on



Mondays tend to follow the trend established on the previous Friday. Consequently, if the market experiences gains on Friday, it should continue that momentum over the weekend and into Monday, and vice versa. The Monday effect is also referred to as the "weekend effect." Several factors, such as short selling, the tendency for businesses to release negative news on Friday evenings, and a decrease in market confidence over the weekend, have been associated with the Monday effect.

Al-Khazali and Mirzaei (2017) found that, except for the Emerging and Global Islamic indexes, Monday had the lowest mean return, while Friday had the highest mean return. These findings align with previous research on the DOW effect in traditional stock indices. They noted that for the Emerging and Global Islamic indexes, the lowest mean return occurred on Tuesday, while the highest occurred on Thursday. However, this study revealed that across all Islamic stock market indices, the mean return and standard deviation tended to be highest on Monday and lowest on Friday. In contrast, Perez (2018) found no statistically significant Monday effect during the 2011-2016 period, but interestingly observed indications of a possible Thursday effect in Chinese stock markets.

The Tuesday effect was also observed in stock markets that displayed significant Monday effects. Additionally, the DJIM Malaysia Titans 25 Index demonstrated a significant Tuesday effect at the 5% level of significance. Conversely, Anwar and Mulyadi (2009) found positive abnormal returns on Fridays in Indonesia and Malaysia but did not find a positive abnormal return on Fridays in Singapore. The study also concluded that there was no negative abnormal return on Mondays in all three countries.

The Wednesday effect was prevalent in most Islamic countries, with the exception of Malaysia, Kuwait, and Turkey. Furthermore, the majority of Middle Eastern countries displayed a significant Thursday effect. The Friday effect was significant at the 1% level for the Jakarta and UAE Islamic stock indices. Zhang et al (2017) applied the rolling sample test method and GARCH model to investigate DOW anomalies in the stock returns of main indices in 28 markets from 25 countries worldwide, and their study demonstrated the prominence of calendar anomalies in those markets.

Table 4.3 provides a summary of the DOW effects where both the EGARCH and GARCH models produced consistent results. In this study, the Monday effect was observed in DJIM, Indonesia, Kuwait, and Pakistan, which aligns with the results of the GARCH model. This finding is consistent with Gharaibeh (2021), who found the DOW effect in Kuwait when examining calendar anomalies in the stock markets of GCC countries (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, Abu Dhabi, and Dubai) using closing price indices for the period of 2012-2017. It is also consistent with Ariss et al (2011), who found that Wednesday had a statistically significant effect on stock market returns in Bahrain and Qatar. The DOW effect was found to be statistically significant on Thursdays for Saudi Arabia, the UAE, and Turkey based on both models.

The Friday effect was observed in DJIM, Malaysia, Jakarta, the UAE, and Pakistan. On the last trading day of the week, stock turnover tends to be lower, and price movements are less significant. Companies with negative news often take advantage of this period to release announcements on Fridays. Due to people's focus on the upcoming weekend, there may be more distracted investors on Fridays compared to other days. This finding underscores the significant contribution of behavioral economics to financial theory. Financial models should incorporate psychological dynamics as evidence suggests that elements such as limited attention can impact stock prices and amplify post-earnings-announcement drift.

The consistency between the Monday effect observed in Islamic stock market indices and

previous studies on traditional stock indices suggests that there may be underlying behavioral and psychological factors influencing market participants' decision-making processes across different markets. The tendency for stock market returns to be lower on Mondays may be attributed to negative news or events that occur over the weekend, leading to a cautious approach by investors at the start of the trading week. The concept of the "weekend effect" aligns with the notion that market participants may need time to process and react to information from the previous week, resulting in a delayed response in stock prices.

Additionally, the finding of a Tuesday effect in Islamic stock markets, particularly in markets displaying a significant Monday effect, adds further complexity to the DOW phenomenon. It suggests that the impact of the previous trading day may spill over to the subsequent day, potentially influenced by investor sentiment, market dynamics, and trading patterns. This finding highlights the importance of considering consecutive trading days and their interdependence when examining calendar anomalies.

Furthermore, the presence of a Wednesday effect in most Islamic countries, except for Malaysia, Kuwait, and Turkey, indicates that mid-week trading may exhibit distinct patterns in certain markets. The underlying causes of this phenomenon require further exploration, considering factors such as market regulations, investor behavior, and regional economic conditions. Similarly, the significant Thursday effect observed in the majority of Middle Eastern countries may be influenced by specific market characteristics or cultural factors related to trading patterns and investor behavior in those regions.

The Friday effect, characterized by smaller stock turnover and less significant price movements, can be attributed to various factors. The strategic timing of companies' news releases on Fridays, when market attention may be lower due to the anticipation of the weekend, suggests an element of behavioral economics. Investors' psychological biases and reduced attention on Fridays may result in subdued trading activity and potentially amplify the impact of any news or announcements made during this period. This finding underscores the need to account for market participants' behavioral tendencies and the influence of psychological factors when analyzing stock market returns.

Comparing the findings of this study with previous research, it is important to consider the differences in data collection, methodologies, and market characteristics. Islamic stock markets operate under specific shariah parameters, which may influence investor behavior and market dynamics compared to conventional markets. These distinctions may contribute to the variations observed in the day of the week effects between Islamic and traditional stock markets. Future studies could delve deeper into these differences and explore the specific factors that drive the observed patterns in Islamic stock markets.

Overall, the findings of this study, in conjunction with previous research, provide valuable insights into the day of the week effect in Islamic stock markets. Understanding and acknowledging these patterns can assist investors in formulating trading strategies, optimizing portfolio allocation, and managing risk. However, it is important to recognize that calendar anomalies are dynamic and subject to changing market conditions, requiring continuous monitoring and adaptation of investment strategies. Further research can explore additional factors, such as market liquidity, investor sentiment, and macroeconomic indicators, to gain a comprehensive understanding of the underlying mechanisms driving the DOW effect in Islamic stock markets.

### **Conclusion and Recommendation**

The study confirms the presence of the day of the week effect (DOW) in Islamic stock markets,

with significant patterns observed in several indices. The Monday effect was present in the stock market returns for DJIM, Indonesia, Kuwait, and Pakistan. This Monday effect, characterized by lower stock market returns, is consistent with previous research findings in both Islamic and traditional stock markets. The Tuesday effect, observed in markets with significant Monday effects, suggests a spillover of the previous trading day's impact to the subsequent day. The Tuesday effect was present in DJIM, Malaysia, Indonesia, Kuwait, and Pakistan stock market returns. The Wednesday effect is prevalent in most Islamic countries, while the majority of Middle Eastern countries exhibit a significant Thursday effect. DJIM, Indonesia, Saudi Arabia, UAE, Qatar, Bahrain, and Pakistan were among the 10 stock markets that had a Wednesday effect. Saudi Arabia, the UAE, Qatar, and Turkey, all had a Thursday effect. Finally, DJIM, Malaysia, Indonesia, the UAE, and Pakistan experienced the Friday effect where the Friday effect, characterized by reduced trading activity and less significant price movements, highlights the influence of psychological and behavioral factors on stock market returns.

This research has substantial implications to market participants such as portfolio managers, investors, market analysts, speculators, arbitrageurs, spreaders, and hedgers, particularly in assisting them with making better investment decisions. The findings of this study can be used by market participants in established and emerging markets to diversify their investments and manage their stock market positions and risks. The study also discovered that calendar anomalies had a significant impact on the stock performance of Islamic stock market indices. Investors can earn abnormal returns by buying stocks on the day with the lowest significant coefficient in a week and selling stocks on the day with the greatest significant coefficient in a week due to the day-of-the-week (DOW) impact. Furthermore, the bulk of these Islamic stock markets are not efficient, as investors can achieve abnormal returns by trading using a technique based on historical data. These findings have ramifications for investors looking for trading tactics to help fulfil their financial goals, as well as for investors seeking to diversify their portfolios so as to maximize return and minimize risk. The results also provide information to policymakers about the current state of Islamic stock markets.

Investors and market participants should be aware of the day of the week effect and consider its implications when making investment decisions in Islamic stock markets. Understanding the patterns can help optimize portfolio allocation and trading strategies. Market regulators and policymakers should monitor and evaluate the impact of the DOW effect on market efficiency and stability in Islamic stock markets. This includes assessing the potential influence of behavioral biases and market dynamics associated with specific trading days.

Further research should explore the underlying factors driving the observed patterns of the DOW effect in Islamic stock markets. Factors such as market regulations, investor behavior, cultural influences, and macroeconomic indicators should be considered in-depth to gain a comprehensive understanding. Islamic financial institutions and market participants should continue to develop innovative financial products and strategies that align with shariah principles while considering the calendar anomalies observed in Islamic stock markets. This will enable investors to diversify their portfolios and manage risks effectively. Regular monitoring and analysis of market trends and anomalies, including the DOW effect, should be conducted by investors, financial institutions, and market analysts to adapt strategies and capitalize on potential opportunities.

In conclusion, this study contributes to the existing literature on the day of the week effect in Islamic stock markets. The findings highlight the significance of calendar anomalies and their implications for investors and market participants. Recognizing and understanding these

patterns can enhance investment decision-making and contribute to the development of more efficient and resilient Islamic financial markets.

Limitations: It is important to acknowledge the limitations of this study. First, the analysis focuses on a specific set of Islamic stock markets, and the findings may not be generalizable to other markets or regions. Second, the study assumes that the selected Islamic stock markets are efficient and adhere to the efficient market hypothesis. However, deviations from this assumption could impact the results. Third, the study relies on historical data, and any changes in market dynamics or regulatory frameworks

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