

# The Existence and Development of the Holiday Effect on the Nepalese Stock Market

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**ABSTRACT:** This paper examines the holiday effect on the Nepalese stock market over an 11-year period. A regression-based approach has been used to ascertain the presence of holiday effect in the Nepalese market. The 11-year data has also been divided into 2 subgroups of 5 years and 6 years to study how the holiday effect has changed over time. The pre-holiday effect could not be identified, but this study has revealed a negative post-holiday effect with increasing intensity dependent on consecutive holidays during the full sample period. Upon examining the two timeframes, it has been discovered that a strong pre-holiday effect existed in the prior periods, which has since diminished, and in the subsequent time periods a negative post-holiday effect with increasing intensity has been observed. This is indicative of the changing perception and behavior of investors in the 11-year period.

**KEYWORDS:** Nepalese, holiday effect, market anomalies, stock market.

## INTRODUCTION

The Efficient Market Hypothesis (EMH) has continues to be a highly debated theory in financial literature. According to the Efficient Market Hypothesis, stock market prices always "completely reflect" all the information that is currently accessible, making the market "efficient" (Fama, 1970). Additionally, according to the idea, there are three levels of market efficiency: weak form, semi-strong form, and strong form.

At the weakest form, the Efficient Market Hypothesis suggests that the historic prices of the stock should not have any predictive power over the future prices of the stock and thus the subsequent changes to price should be random. However, a number of studies have established that stock prices can be predicted on the basis of historic information. In the context of Nepal, it was found that investors could look into the historic returns to predict future returns, and thus the Nepalese stock market was found to be inefficient even at its weakest form (Risal & Koju, 2021). Furthermore, a growing body of research findings presents evidence that the price movements of the stock market are subject to regularity and collectively such incidents have been termed as market abnormalities wherein it has been observed that the rate of return on the market will be inconsistent with the efficient market hypothesis.

A subset of the aforementioned market anomalies are referred to as the calendar anomalies which is also commonly known as the calendar effect. During the 1900s, various calendar effects such as the day of the week effect (French, 1980), the month of the year effect (Ariel, 1987), and the holiday effect

(Fields, 1934) were identified and popularized. The Holiday effect is one of the widely analyzed and accepted calendar anomalies in the stock market. Extensive studies conducted in the US and worldwide stock markets have proven the existence of the holiday effect. The leading explanation for the existence of the holiday effect comes from (Brockman & Michayluk, 1998) who suggested that investors tend to buy stocks before holidays because of 'High spirits' and 'holiday euphoria' which causes them to expect positive returns in the future.

The existence of the calendar effect showed the inefficiency of the stock market and the anomalies have a direct impact on the investor's returns. The ultimate goal of any investor is to maximize their return, therefore the ability of an investor to correctly anticipate market movements and take subsequent market positions could considerably increase profitability on investments and trades. According to the Bikram Sambat Calendar, which is used in Nepal, the government of Nepal has set a total of 95 holidays for 2022, including 52 weekends and 43 national and provincial holidays (Nepal Republic Media Pvt Ltd., 2022). Therefore, there is a need to re-examine the existence and persistence of the holiday effect in the context of Nepal as the Government of Nepal has a tendency of providing a large number of public holidays to appease its diverse population and ethnicity.

## LITERATURE REVIEW AND HYPOTHESIS

### Developed Stock Markets

An early study in the US, found that the Dow Jones Industrial Average (DJIA) showed a high proportion of gains the day

before the holidays (Fields, 1934). Similarly, another early study that compared the pre-holiday returns from 1963 to 1982 found that the pre-holiday rate of return for the Center for Research in Security Prices (CRSP) equal-weighted index and the value-weighted index were 9.44 times and 14.04 times higher than the returns on other days (Ariel, 1990). Furthermore, similar results were replicated when the 90-year DJIA series from 1897 to 1986 were considered and the study found that the pre-holiday returns were 23.30 times more than the normal daily rate of return (Lakonishok & Smidt, 1988). In addition, a prolonged holiday effect was seen in the US capital markets, where abnormally high returns were discovered three to four trading days before the public holiday and abnormally low returns were discovered following the public holiday (Dumitriu & Stefanescu, 2020). The holiday effect has been observed in other established markets, including the European and Australian stock markets. The occurrence of holiday effects was examined on 12 different stock indices of the Australian Stock Exchange (ASX) from 9 September 1996 to 10 November 2006 and the evidence indicated the existence of pre-holiday effects while no evidence for post-holiday effects was observed in any of the selected index (Marrett & Worthington, 2009). Nevertheless, another study conducted in 14 Central and Eastern European (CEE) markets from 1991 to 2010 found the prevalence of the pre and post-holiday effect along with a trend of reduced turnover before holidays (Dodd & Gakhovich, 2011). Furthermore, another extensive study in the Swedish Stock market that considered 40 years from 1980 to 2019 found a positive post-holiday effect over the entire sample period and upon studying 10-year subsamples the study found the existence of a post-holiday effect only in the 1990s and 2000s on the other hand, the pre-holiday effect could not be observed over the entire period and any of the sample periods (Eidnejad & Dahlem, 2021).

### ASIAN STOCK MARKETS

Multiple studies conducted at different time frames and in different parts of the Asian continent have found the existence of the holiday effect. Evidence of the existence of the holiday effect has been confirmed in countries like Bangladesh, India, Indonesia, Singapore, and Thailand among many other countries. An investigation of significantly important holidays of Eid al-Fitr, Eid al-Adha, Christmas, Easter, and Chinese Lunar New year on the Indonesian Stock Market from the period 2005 to 2015 was conducted where it was found that the post-holiday average market returns were 4 times higher than the average returns of the other trading days. However, the different holidays had a diverse influence as Christmas, Easter, and Eid al-Adha showed positive influence while Eid al-Fitr showed negative results and the Chinese Lunar New Year did not show any holiday effects. (Sasikirono & Meidiaswati, 2017).

Furthermore, significant variance in pre-holiday and post-holiday returns with respect to other returns was observed in the Dhaka Stock Exchange (DSE) when 6 fixed national holidays and 2 religious national holidays were assessed during the period of 2013 to 2017 (Hassan & Sarker, 2018). However, another study from 2002 to 2018 pertaining to the Dhaka Stock Exchange (DSE) found that the Muslim holiday of Ramadan did not have any significant relationship with the stock market return and volatility but evidence of reduced trade volumes were observed (Hassan & Kayser, 2019).

Moreover, in another study, the daily closing prices and stock returns were regressed to investigate the existence of pre-holiday and post-holiday effects in the stock markets of India and Singapore from 1992 to 2018. It was concluded that the pre-holiday effect did not exist while the post-holiday effect was found to be statistically significant in both countries however the holiday effect was not observed in Deepawali (Agarwal, Dahiya, & Gupta, 2019). On the contrary, a study of the Thai Stock market during the period of 1992 to 2016 found that there was a statistically significant higher return rate than on normal days in both pre-holiday and post-holiday periods (Chancharat, Maporn, Phunsane, & Chancharat, 2020).

In Nepal, a study conducted by (K.C. & Joshi, 2005) found no evidence of holiday effect during the period 1995 to 2004. In another study, significantly lower returns prior to the Dashain holidays were identified and the effect was termed as Dashain effect (Pant, 2010). On the contrary, another recent study pertaining to Dashain Effect found that the effect did not exist for the NEPSE Index and the Sensitive Index (Bhatt, 2020).

### RESEARCH METHODOLOGY

The sample of data for the NPSE Index and 6 Sub-Indices of the Nepal Stock Exchange (NEPSE) was collected from July 17, 2011, to July 16, 2022, to examine the existence of holiday effects. The total number of trading days was 2,511 days during the aforementioned time frame. The values of the respective Indices were used to compute the logarithmic returns. The formula for calculation of the return of the indices is as follows:

$$R_t = \ln\left(\frac{I_t}{I_{t-1}}\right) * 100 \quad (1)$$

Where,  $R_t$  is the logarithmic return of the respective index,  $I_t$  is the Index value at time  $t$  and  $I_{t-1}$  is the Index value at time  $t-1$ . The closing values of the respective index have been used to calculate the returns and the prior day's closing value has been taken as the closing value in case of a non-trading day. The confidence interval of 95% has been determined for the purposes of this study. Furthermore, the data has been broken down into 2 groups i.e. from 17<sup>th</sup> July, 2011 to 15<sup>th</sup> July, 2016 (5 financial years) and from 16<sup>th</sup> July, 2016 to 16<sup>th</sup> July, 2022

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(6 financial years) for detailed analysis and understanding of the trend in holiday effect.

A regression-based methodology has been adopted to study the holiday effect on the Nepalese Stock Market and Ordinary Least Square (OLS) method has been selected. The pre-holiday period is the day prior to the holiday and the post-holiday period is the day after the holiday. Different dummy variables for the pre-holiday and post-holiday have been used in the regression which is based on the number of consecutive non-trading days as a result of public holidays. The baseline regression model is defined as follows

$$R_t = C + a_1D_tPre_1 + a_2D_tPre_2 + a_3D_tPre_3 + a_4D_tPost_1 + a_5D_tPost_2 + a_6D_tPost_3 + \varepsilon_t \quad (2)$$

Where,  $C, a_1$  to  $a_6$  are the constants,  $D_tPre_1$  to  $D_tPre_3$  are pre-holiday dummy variables for holidays lasting 1 day, 2 days, and 3 or more days respectively. Similarly,  $D_tPost_1$  to  $D_tPost_3$  are post-holiday dummy variables for holidays lasting 1 day, 2 days, and 3 or more days respectively.

### RESULTS AND DISCUSSION

#### Descriptive Statistics

The Table 1 reports the descriptive statistics for the pre-holiday, post-holiday and overall logarithmic returns for the sample indices from 17<sup>th</sup> July, 2011 to 15<sup>th</sup> July, 2022. The most significant holiday effect can be observed when trading is halted for 3 or more days as the average daily return is lowest in all instances and the Standard Deviation is comparably lower than the overall daily standard deviation as well. The Post-holiday effect can be observed to be the weakest when the trading is halted for 1 day only and the post 1-day holiday return is positive for all the indices except for the Others Sub-Index. Moreover, a moderate post-holiday effect can be observed when trading is halted for 2 days as 6 out of the 8 samples index/sub-index have a negative return. Furthermore, the pre-holiday effect can also be observed as the 2 days Pre-Holiday daily returns are positive for all the sample indices and the 3-days Pre-Holiday daily return is positive for all the sampled indices except for hydropower indices. The Standard Deviation of the 3-day Pre-holiday daily return is comparably less volatile than the average daily return. On the contrary, the 1-day pre-holiday daily return is positive for the Banking sub-index and Hydropower Sub-Index only and the return for the rest of the indices are negative.

**Table 1:** Descriptive Statistics for Nepalese Stock Market from 17<sup>th</sup> July, 2011 to 15<sup>th</sup> July, 2022

Index/Sub-Index		Post1	Post2	Post3	Pre1	Pre2	Pre3	Overall
NEPSE	Average	0.08%	-0.05%	-0.42%	-0.06%	0.12%	0.15%	0.07%
	St. Dev	0.35%	0.70%	0.37%	0.28%	0.43%	0.21%	1.35%
	Min	-5.32%	-6.19%	-6.21%	-5.12%	-6.20%	-2.69%	-6.23%
	Max	5.02%	5.87%	5.77%	5.05%	5.51%	5.08%	5.88%
Banking	Average	0.16%	-0.02%	-0.43%	0.01%	0.11%	0.15%	0.06%
	St. Dev	0.41%	0.82%	0.41%	0.36%	0.52%	0.25%	1.55%
	Min	-5.64%	-7.48%	-6.81%	-6.56%	-7.72%	-2.45%	-7.72%
	Max	7.92%	7.94%	7.08%	6.79%	6.63%	8.07%	8.07%
Hydropower	Average	0.04%	-0.10%	-0.69%	0.23%	0.05%	-0.04%	0.05%
	St. Dev	0.49%	0.92%	0.45%	0.40%	0.65%	0.27%	1.88%
	Min	-6.81%	-7.10%	-7.24%	-7.10%	-6.27%	-4.17%	-7.60%
	Max	8.89%	8.33%	4.61%	8.33%	7.10%	3.83%	8.94%
Others	Average	-0.08%	-0.08%	-0.28%	-0.14%	0.15%	0.09%	0.04%
	St. Dev	0.42%	0.80%	0.47%	0.31%	0.58%	0.27%	1.67%
	Min	-10.51%	-10.09%	-9.43%	-6.05%	-7.68%	-2.88%	-10.51%
	Max	6.83%	7.88%	8.55%	4.07%	8.55%	3.53%	9.53%
Life Insurance	Average	0.04%	-0.02%	-0.44%	-0.17%	0.14%	0.26%	0.13%
	St. Dev	0.30%	0.93%	0.51%	0.30%	0.61%	0.30%	1.77%
	Min	-3.34%	-8.62%	-9.54%	-4.57%	-7.98%	-3.34%	-9.54%
	Max	6.55%	9.48%	7.16%	5.06%	7.13%	6.68%	9.48%
Non-Life Insurance	Average	0.10%	0.00%	-0.44%	-0.19%	0.16%	0.35%	0.12%
	St. Dev	0.31%	0.91%	0.48%	0.30%	0.63%	0.30%	1.77%
	Min	-3.34%	-7.81%	-9.10%	-4.57%	-5.14%	-3.02%	-9.10%
	Max	6.55%	8.93%	7.16%	5.06%	7.32%	6.68%	8.93%

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Manufacturing	Average	0.03%	0.03%	-0.12%	-0.08%	0.07%	0.19%	0.09%
	St. Dev	0.23%	0.63%	0.29%	0.17%	0.48%	0.28%	1.31%
	Min	-3.69%	-7.86%	-4.55%	-2.77%	-7.77%	-3.69%	-7.86%
	Max	6.04%	5.82%	6.71%	3.00%	5.49%	5.97%	7.38%
Hotel and tourism	Average	0.33%	-0.11%	-0.50%	-0.06%	0.03%	0.39%	0.07%
	St. Dev	0.33%	0.81%	0.43%	0.29%	0.75%	0.39%	1.84%
	Min	-3.04%	-7.48%	-7.51%	-3.77%	-9.09%	-4.14%	-9.09%
	Max	6.44%	7.64%	6.27%	4.81%	8.96%	6.23%	8.96%

Pre- and Post-Holiday Returns

Table 2: Pre- and Post-holiday effect for Nepalese Stock Market from 17<sup>th</sup> July.2011 to 15<sup>th</sup> July, 2022

Index/ Sub-Index		C	Post1	Post2	Post3	Pre1	Pre2	Pre3
NEPSE	Coefficient	<b>0.125</b>	-0.052	<b>-0.169</b>	<b>-0.540</b>	-0.082	0.000	0.048
	Std. error	0.037	0.143	0.073	0.132	0.143	0.073	0.132
Banking	Coefficient	<b>0.093</b>	0.057	<b>-0.114</b>	<b>-0.524</b>	0.002	0.160	0.061
	Std. error	0.042	0.165	0.084	0.153	0.165	0.084	0.153
Hydropower	Coefficient	<b>0.129</b>	-0.035	<b>-0.167</b>	<b>-0.421</b>	-0.227	-0.008	-0.072
	Std. error	0.039	0.151	0.077	0.140	0.151	0.077	0.140
Others	Coefficient	0.085	-0.189	-0.159	<b>-0.356</b>	-0.143	0.077	0.033
	Std. error	0.046	0.177	0.090	0.164	0.177	0.090	0.164
Life Insurance	Coefficient	<b>0.217</b>	-0.173	<b>-0.219</b>	<b>-0.631</b>	-0.264	-0.065	0.077
	Std. error	0.048	0.188	0.096	0.174	0.188	0.096	0.174
Non-Life Insurance	Coefficient	<b>0.182</b>	-0.098	-0.168	<b>-0.599</b>	-0.263	-0.015	0.193
	Std. error	0.048	0.188	0.096	0.173	0.188	0.096	0.173
Manufacturing	Coefficient	<b>0.182</b>	-0.098	-0.168	<b>-0.599</b>	-0.263	-0.015	0.193
	Std. error	0.048	0.188	0.096	0.173	0.188	0.096	0.173
Hotel and Tourism	Coefficient	<b>0.159</b>	0.183	<b>-0.265</b>	<b>-0.647</b>	-0.089	-0.130	0.233
	Std. error	0.050	0.195	0.099	0.180	0.195	0.099	0.180

Note: the above figures are in percentages (%) and the statistically significant results (P Value <0.05) have been presented in bold.

Table 2 presents the results for the pre-holiday and post-holiday effects using the full sample period. The constant (C) as per Equation (2) was statistically significant for all index/Sub-index except for Others Sub-Index. The pre-holiday effect could not be observed for 1-day pre-holiday daily return, 2-days pre-holiday daily return, and 3 days or more pre-holiday daily return in any of the index/sub-index. There is no conclusive evidence supporting the existence of the pre-holiday effect in the Nepalese stock market for the full sample period.

The post-holiday effect when there is a 1-day holiday is statistically insignificant for all the sample Index/Sub-Index and thus the post-holiday effect could not be observed when there was a single day of holiday. However, in case of 2-days post-holiday daily return, the post-holiday effect was

observed in NEPSE Index, Banking Sub-Index, Hydropower Sub-Index, Life Insurance Sub-Index, and Hotel & Tourism Index but the post-holiday effect was not observed in Others Sub-Index, Non –Life Insurance Sub-Index and Manufacturing sub-index. The coefficient of the 2-day post-holiday dummy variable ranged in between -0.167% and -0.265%. This indicates the existence of the post-holiday effect in the Nepalese stock market in a weaker form. Nevertheless, the 3 days or more post-holiday daily returns for all the sampled index/sub-index were statistically significant and the coefficient for the dummy variables ranged between -0.356% and -0.647%. This suggests a more severe post-holiday effect when the market is closed for 3 or more days.

Trends within Pre- and Post-Holiday Effect

Table 3: Pre- and Post-holiday effect for Nepalese Stock Market from 17<sup>th</sup> July.2011 to 15<sup>th</sup> July, 2016

Index/Sub Index		C	Post1	Post2	Post3	Pre1	Pre2	Pre3
NEPSE	Coefficient	0.087	0.130	-0.021	-0.059	0.202	0.151	0.322
	Std. error	0.052	0.186	0.100	0.177	0.186	0.100	0.177
Banking	Coefficient	0.082	0.249	-0.024	-0.130	0.342	0.137	0.350
	Std. error	0.070	0.254	0.137	0.242	0.254	0.137	0.242
Others	Coefficient	-0.041	-0.038	0.028	0.166	-0.024	<b>0.371</b>	0.238
	Std. error	0.068	0.246	0.132	0.234	0.246	0.132	0.234
Life Insurance	Coefficient	<b>0.236</b>	0.018	-0.001	0.087	-0.003	0.051	<b>0.399</b>
	Std. error	0.058	0.210	0.113	0.200	0.210	0.113	0.200
Non-Life Insurance	Coefficient	<b>0.236</b>	0.018	-0.001	0.087	-0.003	0.051	<b>0.399</b>
	Std. error	0.058	0.210	0.113	0.200	0.210	0.113	0.200
Manufacturing	Coefficient	<b>0.122</b>	-0.052	0.015	-0.057	-0.062	0.003	<b>0.252</b>
	Std. error	0.037	0.133	0.071	0.126	0.132	0.071	0.126
Hotel and Tourism	Coefficient	0.121	0.414	-0.070	-0.298	0.040	0.027	<b>0.470</b>
	Std. error	0.063	0.228	0.123	0.217	0.228	0.123	0.217

Note: the above figures are in percentages (%) and the statistically significant results (P Value <0.05) have been presented in bold.

Table 3 presents the results for the pre-holiday and post-holiday effects as per Equation (2) from 17<sup>th</sup> July.2011 to 15<sup>th</sup> July, 2016. The constant (C) as per Equation (2) is statistically significant for Life Insurance Sub-Index, Non-Life Insurance Sub-Index and Manufacturing Sub-Index. Furthermore, the Pre-holiday effect for 1-day holidays was not statistically significant for any of the sampled Index/ Sub-Index. However, the pre-holiday effect for 2 day long holidays was statistically significant as per the model for Others Sub-Index. Nevertheless, the Pre-holiday effect was more significant when there was consecutive holidays for 3 or more days as the results are significant for Life Insurance Sub-index, Non-Life Insurance Sub-Index, Manufacturing Sub-Index and Hotel and Tourism Sub-Index among the sampled indices. The variables for 2 days pre-holiday and 3 or more days pre-holiday the coefficient of the dummy variables were positive which signifies that the existence of a positive effect on market returns prior to holidays. On the contrary, the post-holiday effect was statistically insignificant

across all sampled index/sub-index and consecutive holidays. This indicates that the post-holiday effect was non-existent from 17<sup>th</sup> July.2011 to 15<sup>th</sup> July, 2016

Although the pre-holiday effect was not significant as per the model proposed in equation (2), the post-holiday effect could be observed during the period between 17<sup>th</sup> July, 2011 to 15<sup>th</sup> July, 2022. The severity of the post-holiday effect could be observed to occur in concurrence with the consecutive public holidays announced by the government as the effect is non-existent after 1 day holidays but the post-holiday effect could be observed for most of the index/sub-index when there was a 2-day gap and the effect was most severe when there were consecutive holidays for 3 or more days. The coefficient of all the dummy variables for the post-holiday effect was negative. Which indicates that due to behavioral and psychological aspects of the investors there is a general tendency of the market to decline after long holidays declared by the government.

Table 4: Pre- and Post-holiday effect for Nepalese Stock Market from 16<sup>th</sup> July, 2016 to 16<sup>th</sup> July,2022

Index/Sub Index		C	Post1	Post2	Post3	Pre1	Pre2	Pre3
NEPSE	Coefficient	<b>0.155</b>	-0.246	<b>-0.295</b>	<b>-0.977</b>	-0.362	-0.137	-0.182
	Std. error	0.051	0.214	0.104	0.193	0.215	0.104	0.193
Banking	Coefficient	0.100	-0.147	-0.190	<b>-0.878</b>	-0.346	-0.096	-0.188
	Std. error	0.051	0.214	0.103	0.192	0.214	0.103	0.192
Others	Coefficient	<b>0.185</b>	-0.357	<b>-0.317</b>	<b>-0.838</b>	-0.221	-0.177	-0.119
	Std. error	0.061	0.255	0.123	0.230	0.256	0.123	0.230
Life Insurance	Coefficient	<b>0.202</b>	-0.381	<b>-0.409</b>	<b>-1.298</b>	-0.526	-0.178	-0.200
	Std. error	0.077	0.323	0.156	0.290	0.323	0.156	0.290
Non-Life Insurance	Coefficient	0.140	-0.235	<b>-0.314</b>	<b>-1.244</b>	-0.531	-0.084	0.016
	Std. error	0.063	0.228	0.123	0.217	0.228	0.123	0.217

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	Std. error	0.073	0.304	0.147	0.273	0.304	0.147	0.273
Manufacturing	Coefficient	<b>0.130</b>	-0.132	-0.170	-0.378	-0.266	-0.104	-0.077
	Std. error	0.057	0.240	0.116	0.216	0.240	0.116	0.216
Hotel and Tourism	Coefficient	<b>0.191</b>	-0.067	<b>-0.434</b>	<b>-0.967</b>	-0.207	-0.273	0.034
	Std. error	0.075	0.312	0.151	0.280	0.312	0.151	0.280

Note: the above figures are in percentages (%) and the statistically significant results (P Value <0.05) have been presented in bold.

Table 4 presents the results for the pre-holiday and post-holiday effects from 16th July, 2016 to 16th July, 2022. The constant (C) as per Equation (2) is statistically significant for Others Sub-Index, Life Insurance Sub-Index, Manufacturing Sub-Index, and Hotel and Tourism Sub-Index. However, the pre-holiday effect could not be found in any of the samples on 1-day, 2-days, and 3 or more days pre-holiday daily return. Furthermore, the post-holiday effect could not be seen in the 1-day post-holiday return for any of the sampled index/sub-index. Nevertheless, the post-holiday effect could be observed in 2-days post-holiday daily returns. The coefficient for the dummy variables was statistically significant for all the sampled Index/Sub-Index except Banking Sub-Index and Manufacturing Sub-Index. Additionally, a more severe post-holiday effect could be observed when there were 3 or more consecutive holidays as indicated by the higher coefficient for the dummy variables but the post-holiday effect could not be observed in the Manufacturing Sub-Index.

The results from Table 3 & Table 4 represent the outcome from 17<sup>th</sup> July, 2011 to 15<sup>th</sup> July, 2016 and from 16<sup>th</sup> July, 2016 to 16<sup>th</sup> July, 2022 respectively. In the period between 2011-2016 a moderate pre-holiday effect could be observed in a few of the samples when there were 3 or more consecutive holidays but the post-holiday effect could not be observed. However, in the period between 2016-2022, a moderate post-holiday effect could be observed in the case of 2 holidays consecutively and a more severe impact could be observed when there were 3 or more consecutive holidays but the pre-holiday effect could not be observed. Initially, it can be observed that the general investors went on holidays with an optimistic view and due to this euphoria they had a tendency to view the market optimistically. However, the results from 2016-2022 suggest that the effect of holiday euphoria has waned and investors have become in general more pessimistic upon returning from long holidays.

### CONCLUSION AND RECOMMENDATION

This study examined the presence of the holiday market in the NEPSE Index along with 6 other diverse sub-indices from 2011 to 2022. Evidence supporting the existence of the holiday effect has been over the full sample period and sub-periods 2011 to 2016 and 2016 to 2022. The pre-holiday effect is non-existent over the full sample period as per the proposed model but the post-holiday effect could be observed over the full period. Additionally, it was evident that the stock market results were negatively impacted by the post-holiday

effect, which became more pronounced as the number of succeeding holidays increased.

Furthermore, upon analysis of the two timeframes, it could be found that from 2011 to 2016 there was no indication of the post-holiday effect but a moderately positive impact due to the pre-holiday effect could be observed when the number of consecutive holidays was 3 or more. Additionally, upon examination of data from 2016-2022, the pre-holiday effect had waned and the post-holiday effect was non-existent in case of a one-day holiday. However, a moderate post-holiday effect could be observed in the case of a two-day holiday and an even more severe post-holiday effect was observed when the number of consecutive holidays was days or more.

The findings of this study further provide support to the findings of (Risal & Koju, 2021), where the Nepalese stock market was found to be inefficient even in its weakest form. Furthermore, the findings of this study is contrary to the findings of (K.C. & Joshi, 2005; Bhatt, 2020) where studies had not found any form of holiday market in the Nepalese market. However, the finding of this study is in line with the findings of (Pant, 2010), whose study found lower market returns after Dashain holidays. Moreover, the decline of the pre-holiday effect could be explained by the generous holiday policy adopted by the Nepalese government which may have played a role in lowering pre-holiday excitement.

The discovery of statistically significant anomalies could imply the possibility of adopting trading strategies to optimize and improve the yields of professionally managed funds. The average 3 or more days post-holiday daily effect was -0.42% and the brokerage charge as determined by the regulatory body is between 0.268% to 0.402% as per the transaction amount. Thus, this situation presents a trading opportunity with marginal benefits. However, the returns may be justifiable for transactions warranting lower brokerage charges.

This evidence presented in this paper opens the door for further research on calendar effects specifically for the Nepalese stock market. Further exploration of the behavior aspect triggering the holiday effects could be a possible direction for future research. The study of the holiday effect could be continued for other developed or emerging markets.

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