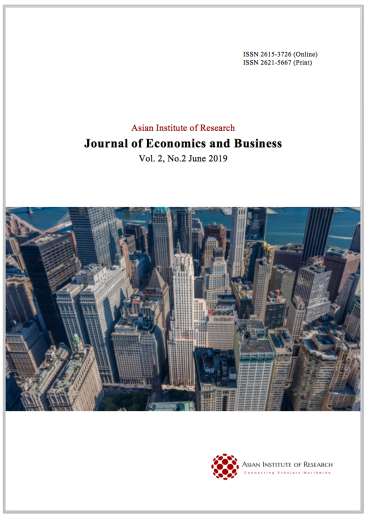

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Implications of Daily Market Statistics on Daily Stock Market Index: Empirical Evidence from Colombo Stock Exchange

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Abstract
This study examined the implications of stock market statistics on share price index, using daily data for the period from 1/03/1994 to 9/28/2018 (5932 Observations) on the Colombo Stock Exchange (CSE). The main objectives of the study were to assess the significant relationship between stock market statistics and share price index and to investigate the co-integration between the variables. The study adopted the ex-post facto research design. Daily market capitalization, daily share traded, and daily turnover equity was used as the proxies for the stock market statistics. Daily All Share Price Index (ASPI) was used as the proxy for the stock price index. Augmented Dickey Fuller test was used to find out the stationery of the data series, and the results of the test showed that ASPI data and stock market statistics were stationary. The Granger Causality test was used to check any causal relationship between variables revealed that, there is a one-way causal relationship between variables. The result of the regression shown that daily market capitalization was found to be a significant positive relationship with ASPI, daily share traded equity was found to be an insignificant relationship with ASPI and daily turnover equity was found to be an insignificant relationship with ASPI. In line with the findings of this study, it recommends that the CSE should build policies and potential investors should make the strategies in terms of share trading volume to enhance the stock market liquidity.

Keywords: Colombo Stock Exchange (CSE), Daily All Share Price Index (ASPI), Daily market capitalization, Daily share traded equity, and Daily turnover equity

1. Introduction

1.1. Background of the Study

Impact of market statistics on stock price/ index/ return has been concerned by the research analysts and policymakers. Research analysts and policymakers used market capitalization, share traded equity, and turnover equity of a stock market in order to identify the liquidity position of a stock market. Market capitalization is a common index used to measure the size of the stock market. Share traded equity measures the organized trading of equities as a share of output. Turnover equity is used to a measure the value of securities transactions relative

to the size of the securities market. Stock market liquidity is one of the imperative characteristics of financial market and noticeably significant for the current and potential investments.

Stock return is a reward an investor obtains for a stock holding in a particular period. The Colombo Stock Exchange (CSE) which operates the only share market in Sri Lanka is a company limited by guarantee, established under the Companies Act No. 17 of 1982 and is licensed by the Securities and Exchange Commission (SEC) of Sri Lanka. The share market was opened to the public in July 1984. In 1985, a formal stock exchange was established in Sri Lanka. It was formerly called the Colombo Securities Exchange Limited. It has been calling as the CSE since 1990. The main contribution of this study is in its examination of the implications of daily market statistics on the daily stock market index in the CSE.

1.2. Research Problem

After a keen literature on the market statistics or the stock market liquidity on the stock price or stock return of various countries' stock markets, the researcher identified that those studies had been revealed contradict findings in the area of stock market liquidity and stock price/ index/ return. Stock in trade in a stock market could be upraised by different ways under well-administered rules and regulations, which are carefully governed by market operators. (Ogwuru and John, 2018). As liquidity of a stock market increases, stock returns increase or decline. The literature has proposed market capitalization, share traded equity, and turnover equity are the main proxies used as stock market statistics. With this context in mind, this study seeks to investigate the implications of daily market statistics on the daily stock market index at the CSE. Following research questions needs to be answered.

Q1. What would be the impact of daily market capitalization on daily ASPI of the CSE?
Q2. What would be the impact of daily share traded on daily ASPI of the CSE?
Q3. What would be the impact of daily turnover equity on daily ASPI of the CSE?

1.3. Relevant Literature

This section gives the theoretical underpinnings and the empirical literature.

1.3.1. Theoretical underpinnings

The Efficient Market Hypothesis (EMH) theorizes that stocks are priced efficiently to reflect all the available information on the intrinsic value of the security as it has been supposed that an efficient market is one where all unexploited profit opportunities are eliminated by arbitrage (Ajayi, Mehdian & Perry, 2004 as cited in Gbalam, 2019). Testing the market efficiency is vital for the investors, stockbrokers, financial institutions, government, etc. for understanding how capital markets are efficiently functioning and ability to increase the liquidity (Gbalam, 2019).

1.3.2. Empirical Literature

Gbalam (2019) examined a study on measuring liquidity effects of stock market returns on one of the leading quoted participants in the banking sector –Zenith Bank PLC for the period from 2001 to 2017. The All Share Index used as a proxy for stock returns and the market capitalization ratio measured by the value of shares traded divided by market capitalization multiplied by 100. The result shows that the market capitalization value ratio has a positive and significant impact on All-Share Index. Ogwuru and John (2018) have done a study on measuring liquidity and stock returns of ten quoted companies in the Nigerian Stock Exchange. It was found that there was a significant relationship between their liquidity measured by market capitalization ratio and their respective stock market returns. In all the selected quoted companies, the level of their liquidity significantly impacts on the degree or volume of returns made from stocks of the Nigerian Stock Exchange.

Kahuthu (2017) explored a study on whether stock market liquidity has an effect on stock returns of 50 companies listed at the Nairobi Securities Exchange from 2012 to 2016. Considering the width and depth aspects of liquidity measured by bid-ask spread and turnover rate, the study shows that market depth was found to be insignificant to stock returns while market width was found significant. The study revealed that market participants perceived both

market width and depth to be significant to stock returns but only to a moderate extent. Liquidity was found to be significant but not the main predictor of stock returns. John, Okanta, and Nkama (2017) explored a study on trading volume and market turnover in the Nigerian Stock Market and their implications to stock market returns. Findings of the study revealed that the value of the transaction ratio has a negative and significant impact on the stock return. Turnover equity has a positive and significant impact on the share price index. The study concluded by stating that the volume of trade had a negative but significant effect on stock returns and attributes it the possibility of investor misspecification about future earnings or illiquidity of low volume stocks. The turnover at the market had a positive and significant effect on the stock market returns attributable to possible anticipation of higher market illiquidity by investors and consistent with the positive cross-sectional relationship between stock return and illiquidity.

John, Ibekwe, Uloma, and Egbo (2017) investigated a study on measuring daily stock market returns using market capitalization ratio in Nigeria for the period of 14 years from 2nd January 2001 to 31st December 2015 adopting the ex-post facto research design. The main findings of their study revealed that market capitalization value ratio has a positive and significant effect on stock returns. John (2016) investigated a study on the effect of stock market liquidity on daily returns in the Nigerian Capital Market adopting the ex-post facto research design and data were obtained from daily reports of the Nigerian Stock Exchange from 2nd January 2001 to 31st December 2015. The results revealed that the market capitalization value ratio has a positive and significant effect on stock returns. The value of transaction ratio shows a negative and significant impact on the stock returns.

Wei (2014) investigated a study on stock market liquidity and stock returns of the London Stock Exchange employing different proxies of liquidity such as: trading Cost based illiquidity proxies (bid ask spread, effective spread and quoted spread), trading quantity-based proxies (dollar trading volume and turnover ratio), trading speed-based proxy (Liu's measure) and price impact-based proxies (Amihud's ratio and turnover ratio). Findings show that a negative relationship between illiquidity and asset pricing. As illiquidity increases, instead of rises in stock returns, post ranking returns decrease. Chrisostomos, Andros, and Alexandros (2010) proposed a new price impact ratio as an alternative to the widely used Amihud's (2002) Return-to-Volume ratio. This new measure, which is deemed Return-to-Turnover ratio, essentially modifies Return-to-Volume ratio by substituting trading volume in its denominator with the turnover ratio for each security using daily data from all stocks listed on the London Stock Exchange over the period from 1991 to 2008. They argued against the conventional wisdom that there is a simple direct link between trading costs and stock prices.

The above literature review shows that most studies focused on only the foreign stock markets and considered a few years' data set. According to the literature, it has been observed that almost all the studies employed the monthly or the annual data set of a stock market. The purpose of this research is to bridge the gap identified in the literature and assess the implications of daily statistics on daily ASPI of the CSE. This study would be capable of providing in-depth analysis considering the period of 24 years from 1/03/1994 to 9/28/2018 (5932 Observations).

1.4. Objectives of the Study

Based on the literature review and the research questions following objectives were formulated:

1. to assess the impact of daily market capitalization on daily ASPI of the CSE.
2. to assess the impact of daily share traded on daily ASPI of the CSE.
3. to assess the impact of daily turnover equity on daily ASPI of the CSE.

1.5. Hypotheses and Their Correspondence to Research Design

As a follow-up to the research questions and objectives of the study, the following series of hypotheses were formulated based on the literature review.

Hypothesis 1 (H1)

$H_0$1: There is no significant impact of daily market capitalization on daily ASPI of the Colombo Stock Exchange.

$H_1$1: There is a significant impact of daily market capitalization on daily ASPI of the Colombo Stock Exchange.

Hypothesis 2 (H2)

$H_0$2: There is no significant impact of daily share traded on daily ASPI of the Colombo Stock Exchange.

$H_1$2: There is a significant impact of daily share traded on daily ASPI of the Colombo Stock Exchange.

Hypothesis 3 (H3)

$H_0$3: There is no significant impact of daily turnover equity on daily ASPI of the Colombo Stock Exchange.

$H_1$3: There is a significant impact of daily turnover equity on daily ASPI of the Colombo Stock Exchange.

The remaining of this research paper is structured as follows: Section 2 describes Methods and/or techniques; section 3 shows the results; section 4 shows the discussions, and section 5 shows the conclusion.

2. Methods and/or techniques

This section covers the research approach, data collection, variables, conceptual framework, and operationalization of the variables, mode of data analysis, hypotheses of the study, and empirical model.

2.1. Research approach

This study adopts the ex-post facto research design since the study used previous information of the variables. In the context of social and educational research the phrase 'after the fact' or 'retrospectively' refers to those studies which investigate possible cause-and-effect relationships by observing an existing condition or state of affairs and searching back in time for plausible causal factors (John & Okanta, 2017).

2.2. Data Collection

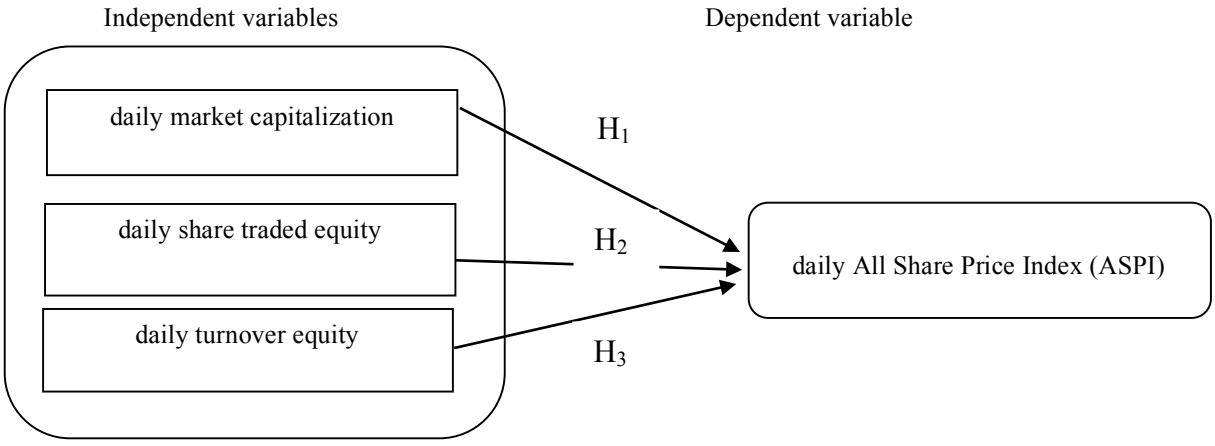
The data used for this research was generated from the CSE official CD (Microsoft Excel track sheets) from 1/03/1994 to 9/28/2018 (5932 Observations).

2.3. Variables

Daily market capitalization, daily share traded, and daily turnover equity was used as the proxies for the stock market statistics. Daily All Share Price Index (ASPI) was used as the proxy for the stock price index.

2.4. Conceptual framework

Figure-1 below shows the conceptual framework of this research study, which is based on the extant empirical literature review, depicts the relationship between independent variables and dependent variables.



Source: Researcher's own compilation based on Literature review.

Figure 1. conceptual framework

2.5. Operationalization of Study Variables

Table 1 illustrates the operationalization of the selected independent and dependent variables**.**

Table 1. Operationalization of Variables

Category	Variable	Proxies	Measurement	Hypothesized direction	Extant Studies
Independent variable	Daily Market Statistics	daily market capitalization	total rupee value of the market value of outstanding shares	Positive/ Negative	Gbalam (2019) Ogwuru and John (2018) John, Ibekwe, Uloma, and Egbo (2017) John (2016)
		daily share traded equity	total rupee value of the share traded equity	Positive/ Negative	John (2016) John, Okanta, and Nkama (2017)
		daily turnover equity	dividing the total number of shares traded by the average number of shares	Positive/ Negative	John, Okanta, and Nkama (2017)
Dependent variable	Daily Share Price Index	daily All Share Price Index (ASPI)	The index is calculated in real-time as a market capitalization weighted index, which constitutes all voting and non-voting ordinary shares listed on the CSE.	Positive/ Negative	Gbalam (2019) Ogwuru and John (2018) John, Ibekwe, Uloma, and Egbo (2017) John, Okanta, and Nkama (2017) John (2016)

Source: Researcher's own compilation based on Literature review.

2.6. Mode of data analysis

Augmented Dickey Fuller test was used to find out the stationery of the data series, and the results of the test showed that ASPI data and stock market statistics were stationary at first difference. The Granger Causality test was used to check any causal relationship between stock prices and stock market liquidity outcomes showed that, there is a one-way causal relationship between variables. To check the result of the Granger Causality test, a regression was run.

2.7. Empirical Model

$$\text{Log ASPI} = \beta_0 + \beta_1 \text{ Log MC} + \beta_2 \text{ Log STE} + \beta_3 \text{ Log TE} + \varepsilon$$

Where:

Log ASPI:	Natural Log of daily All Share Price Index
Log MC:	Natural Log of daily Market Capitalization
STE:	Daily Share Traded Equity
TE:	Daily Turnover Equity
ε:	Error term

Results which are performed using E-Views are discussed in the next section.

3. Results

This section presents the diagnostic tests and correlation and multiple regression analysis.

3.1. Diagnostic Tests

This section presents the results of the following diagnostic tests: the unit root test, causality test, Heteroscedasticity test, Serial Correlation test, and Multicollinearity test.

3.2. Unit Root Test

The time series data was tested for the whether there was a presence of unit root to ensure that the parameters estimated are stationary. ADF was performed. To reject the null hypothesis that the data are non –stationary, the ADF statistics must be negative and less than the critical values and significant.

Table 2. Unit Root Test

No	Variables	Intercept				Constant and trend			
		ADF t-statistics	Prob.*	5% Critical Value	Order Of I	ADF t-statistics	Prob.*	5% Critical Value	Order Of I
1	LMC	-0.1530	0.9418	-2.8618	I(1)	-1.5710	0.8044	-3.4105	I(1)
2	D(LMC)	-72.2063	0.0001	-2.8618	I(0)	-72.201	0.0000	-3.4105	I(0)
3	LST	-4.3042	0.0004	-2.8618	I(10)	-8.3714	0.0000	-3.4105	I(9)
4	LTE	-4.4703	0.0002	-2.8618	I(10)	-7.8378	0.0000	-3.4105	I(9)
5	LASPI	-0.1594	0.9410	-2.8618	I(3)	-2.0359	0.5809	-3.4105	I(3)
6	D(LASPI)	-39.3844	0.0000	-2.8618	I(2)	-39.3896	0.0000	-3.4105	I(2)
		*MacKinnon (1996) one-sided p-values.							

The result of the unit root test is depicted in Table 2. As revealed, all variables employed in the study are stationary since the ADF Statistics is less than the critical values at 5% and significant.

3.3. Causality test

The granger causality test was conducted to test the causality of the impact of the independent variables on the dependent variable. Optimal lag selection criteria are given in Table 3.

Table 3. Optimal lag selection criteria

VAR Lag Order Selection Criteria
Endogenous variables: DLASPI DLMC LSTE LTE
Exogenous variables: C
Date: 04/27/19 Time: 10:00
Sample: 1/03/1994 9/28/2018
Included observations: 5920

Lag	LogL	LR	FPE	AIC	SC	HQ
0	23364.19	NA	4.39e-09	-7.891957	-7.887439	-7.890387
1	29286.86	11835.33	5.97e-10	-9.887452	-9.864864	-9.879603
2	29990.11	1404.361	4.73e-10	-10.11963	-10.07897	-10.10550
3	30297.02	612.4725	4.29e-10	-10.21791	-10.15918	-10.19750
4	30464.38	333.7562	4.08e-10	-10.26905	-10.19225	-10.24236
5	30569.07	208.6442	3.96e-10	-10.29901	-10.20414	-10.26604
6	30648.00	157.1986	3.87e-10	-10.32027	**-10.20733***	-10.28102
7	30690.99	85.55730	3.84e-10	-10.32939	-10.19838	-10.28386
8	30724.10	65.84019	3.82e-10	-10.33517	-10.18609	-10.28336
9	30769.08	89.40398	3.78e-10	-10.34496	-10.17781	-10.28687
10	30809.79	80.84715	3.75e-10	-10.35331	-10.16808	-10.28894*
11	30834.14	48.33299*	3.74e-10*	**-10.35613***	-10.15283	-10.28548
12	30841.45	14.50948	3.75e-10	-10.35319	-10.13183	-10.27627

* indicates lag order selected by the criterion.
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

As revealed in Table 3, Using various lag-order selection criteria, the results in Table-02 demonstrates that the optimal lags for variables in the specified error correction model are lag 6 and 11.

Table 4. Granger Causality Test at Lag Order 6

Pairwise Granger Causality Tests
Date: 04/27/19 Time: 10:02
Sample: 1/03/1994 9/28/2018
Lags: 6

Null Hypothesis:	Obs	F-Statistic	Prob.
DLMC does not Granger Cause DLASPI	5926	1.24187	0.2813
DLASPI does Granger Cause DLMC		110.561	1E-132
LSTE does not Granger Cause DLASPI	5926	2.67380	0.0136
DLASPI does Granger Cause LSTE		5.76888	5.E-06
LTE does not Granger Cause DLASPI	5926	3.22003	0.0037
DLASPI does Granger Cause LTE		9.22391	4.E-10
LSTE does not Granger Cause DLMC	5926	3.53078	0.0017
DLMC does Granger Cause LSTE		3.59019	0.0015
LTE does not Granger Cause DLMC	5926	3.32478	0.0029
DLMC does Granger Cause LTE		6.14913	2.E-06
LTE does not Granger Cause LSTE	5927	4.98306	4.E-05
LSTE does Granger Cause LTE		10.3934	2.E-11

The granger causality test was conducted to test the causality of the impact of the independent variable on the dependent variable. As indicated in the Table-04, it was revealed that DLMC does not granger cause ASPI (p – value 0.2813 > 0.05) however, ASPI of the CSE granger cause DLMC (p-value = 0.000 < 0.05). Hence, there is a unidirectional relationship between DLMC and ASPI. LSTE does granger cause ASPI (p – value 0.0136 < 0.05), ASPI of the CSE granger cause LSTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LSTE and ASPI. LTE does granger cause ASPI (p – value 0.0037 < 0.05), ASPI of the CSE granger cause LTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LTE and ASPI.

The granger causality test was conducted to also test the causality of the impact among the independent variables. It was revealed that LSTE does granger cause DLMC (p – value 0.0017 > 0.05), DLMC granger cause LSTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LSTE and DLMC. LTE does granger cause DLMC (p – value 0.0029 < 0.05), DLMC granger cause LTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LTE and DLMC. LTE does granger cause LSTE (p – value 0.0000 < 0.05), LSTE granger cause LTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LTE and ASPI.

Table 5. Granger Causality Test at Lag Order 11

Pairwise Granger Causality Tests
Date: 04/27/19 Time: 10:04
Sample: 1/03/1994 9/28/2018
Lags: 11

Null Hypothesis:	Obs	F-Statistic	Prob.
DLMC does not Granger Cause DLASPI	5921	0.78308	0.6575
DLASPI does Granger Cause DLMC		60.3897	5E-128
LSTE does not Granger Cause DLASPI	5921	2.49939	0.0039
DLASPI does Granger Cause LSTE		5.08894	6.E-08
LTE does not Granger Cause DLASPI	5921	2.45587	0.0046

DLASPI does Granger Cause LTE		7.86926	1.E-13
LSTE does not Granger Cause DLMC	5921	2.54917	0.0032
DLMC does Granger Cause LSTE		3.99644	8.E-06
LTE does not Granger Cause DLMC	5921	2.66354	0.0021
DLMC does Granger Cause LTE		6.62113	4.E-11
LTE does not Granger Cause LSTE	5922	2.34088	0.0072
LSTE does Granger Cause LTE		4.75299	3.E-07

As indicated in the Table 5, it was revealed that DLMC does not granger cause ASPI (p – value 0.6575 > 0.05) however, ASPI of the CSE granger cause DLMC (p-value = 0.000 < 0.05). Hence, there is a unidirectional relationship between DLMC and ASPI. LSTE does granger cause ASPI (p – value 0.0039 < 0.05), ASPI of the CSE granger cause LSTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LSTE and ASPI. LTE does granger cause ASPI (p – value 0.0046 < 0.05), ASPI of the CSE granger cause LTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LTE and ASPI.

It was also revealed that LSTE does granger cause DLMC (p – value 0.0032 > 0.05), DLMC granger cause LSTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LSTE and DLMC. LTE does granger cause DLMC (p – value 0.0021 < 0.05), DLMC granger cause LTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LTE and DLMC. LTE does granger cause LSTE (p – value 0.0072 < 0.05), LSTE granger cause LTE (p-value = 0.000 < 0.05). Hence, there is not a unidirectional relationship between LTE and ASPI.

3.4. Heteroskedasticity Test

In this study, the researcher used the Breusch-Pagan-Godfrey test and White test to detect whether there was a problem of heteroscedasticity.

Table 6. Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
Null hypothesis: Homoskedasticity			
F-statistic	7.143134	Prob. F(3,5928)	0.0001
Obs*R-squared	21.36662	Prob. Chi-Square(3)	0.0001
Scaled explained SS	8232.472	Prob. Chi-Square(3)	0.0000

According to Table 6, the results indicate that both the F test and the LM (obs*Rsquared of the auxiliary regression) conclude for the rejection of the null of homoskedasticity.

3.5. Serial Correlation Test

In this study, the researcher used the Breusch-Godfrey Serial Correlation LM test to detect whether there was a problem of serial correlation.

Table 7. Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:			
Null hypothesis: No serial correlation at up to 2 lags			
F-statistic	110.6896	Prob. F(2,5926)	0.0000
Obs*R-squared	213.6229	Prob. Chi-Square(2)	0.0000

According to Table 7, the Breusch-Godfrey test results indicate that the Null is of the absence of autocorrelation. The Durbin Watson statistic, as shown in the Table-10, indicate that there is no trace of autocorrelation.

3.6. Multicollinearity test

If the Variance Inflation Factor (VIF) exceeds 10, there will be a problem of multicollinearity. Coefficients of correlation (r) between independent variables should not be considered harmful until they exceed 0.80 or 0.90. If

the r values among independent variables are more than 0.8, the problem of multicollinearity will occur. This problem may lead to strange results in regression analysis, for instance, the adjusted coefficient of determination (R^2) becomes too high and not statistically significant.

Table 8. Multicollinearity test

Variable	VIF
DLMC	1.011747
LSTE	7.675588
LTE	7.696615

According to Table 8, VIF of variables is less than 10, which indicates there was no such problem. According to the Table-09, all the correlations among independent variables are lower than 0.80, indicating that no multicollinearity exists between the variables.

3.7. Correlation analysis

Correlation analysis shows whether and how strongly pairs of dependent and independent variables are related.

Table 8. Correlation analysis

	DLASPI	DLMC	LSTE	LTE
DLASPI	1			
DLMC	0.8376	1		
LSTE	0.1015	0.0926	1	
LTE	0.1135	0.1062	0.9325	1

According to Table 9, there was a strong positive correlation between DLMC and ASPI of the CSE. There was a weak positive correlation between LSTE and ASPI of the CSE. There was also a weak positive correlation between LTE and ASPI of the CSE.

3.8. Multiple Linear Regression

The significance of the regression model is compared at an error level of 5%, and it proved that the model is significant.

Table 9. Multiple Linear Regression

Dependent Variable: DLASPI
Method: Least Squares
Date: 04/27/19 Time: 09:57
Sample (adjusted): 1/04/1994 9/28/2016
Included observations: 5932 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000788	0.000469	-1.681030	0.0928
DLMC	0.693375	0.005920	117.1273	0.0000***
LSTE	5.25E-05	0.000129	0.407511	0.6836
LTE	0.000115	0.000131	0.883513	0.3770
R-squared	0.702207	Mean dependent var		0.000300
Adjusted R-squared	0.702056	S.D. dependent var		0.010518
S.E. of regression	0.005741	Akaike info criterion		-7.481573
Sum squared resid	0.195405	Schwarz criterion		-7.477063
Log likelihood	22194.35	Hannan-Quinn criter.		-7.480006
F-statistic	4659.471	Durbin-Watson stat		2.359664
Prob(F-statistic)	0.000000			

According to Table 10, it indicated that the model used by the F-Statistics was well fitted (F = 4659.471). R^2 which shows the goodness of fit of the model indicates that 70.22% of the variations observed in the dependent variable

for the three hypotheses were explained by the independent variables and the 29.78% is caused by other factors which cannot be observed. The difference between R^2 and adjusted R^2 interprets that the model independent variables have been selected correctly.

4. Discussions

The result of hypothesis one shows that DLMC has a positive and significant impact on the daily ASPI (coefficient = p = 0.0000 < 0.05, t-value = 117.1273). Therefore, there is a significant impact of daily market capitalization on daily ASPI of the CSE. The alternative hypothesis of $H_1 1$ is accepted. The findings are in line with the studies of Gbalam, 2019, Ogwuru and John, 2018, John, Ibekwe, Uloma and Egbo, 2017, and John, 2016. The result of hypothesis two shows that LSTE has an insignificant impact on the daily ASPI (coefficient = p = 0.6836 > 0.05, t-value = 0.4075). Therefore, there is no significant impact of daily share traded equity on daily ASPI of the CSE. Null hypothesis of $H_0 2$ is not rejected. The findings are contradictory with the study of John, 2016 and John, Okanta, and Nkama (2017), which found the value of transaction ratio shows a negative and significant impact on the stock returns. The result of hypothesis three shows that LTE has an insignificant impact on the daily ASPI (coefficient = p = 0.3770 > 0.05, t-value = 0.883513). Therefore, there is no significant impact of daily turnover equity on daily ASPI of the CSE. Null hypothesis of $H_0 3$ is not rejected. The findings are contradictory with the study of John, Okanta, and Nkama (2017), which found turnover equity has a positive and significant impact on the share price index.

Figures of Akaike/Schwartz/Hannan-Quinn info criterion indicate that it is the best model to adopt.
Empirical Model can be expressed as follows:
Log ASPI = -0.000788 + 0.693375 Log MC + 5.25E-05 Log STE + 0.000115 Log TE + ε

The next section gives a conclusion to the study.

5. Conclusions

This study examined the implications of stock market statistics on share price index, using daily data for the period from 1/03/1994 to 9/28/2018 (5932 Observations) on the CSE. The Granger Causality test was used to check any causal relationship between variables revealed that, there is a one-way causal relationship between variables. The result of the regression shown that daily market capitalization was found to be a significant positive relationship with ASPI, daily share traded was found to be an insignificant relationship with ASPI, and daily turnover equity was found to be an insignificant relationship with ASPI. The study recommends that the CSE should build policies, and potential investors should make the strategies in terms of share trading volume to enhance the stock market liquidity.

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