STOCK MARKET PERFORMANCE UNDER DIFFERENT PRESIDENTIAL TERMS: EVIDENCE FROM SRI LANKA

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Abstract

Colombo Stock Exchange (CSE) plays a vital role in the growth of the key sectors of Sri Lankan economy. Even though there are several macro and firm specific factors effect on stock market performance, the main focus of this study is to examine the performance of CSE under different government leadership in Sri Lanka during the period from 1994 to 2014. This study mainly consider about the stock market indicators such as, All Share Price Index (ASPI), market turnover, market capitalization, turnover ratio, average market return etc. under different presidential terms. The sample period has divided in to four main presidential terms. Based on the indicators calculated to reflect the average market return, volatility and risk for each presidential term and based on the statistical analysis performed for each presidential term it was revealed that performance of stock market is superior under presidential term II (from 1999-2005).

Keywords: Colombo Stock Exchange, Presidential term, Stock market indicators, All Share Price Index, Market return

1 INTRODUCTION

There are number of factors and events affect to stock market performance of a country. Broadly these factors can be divided in to macro factors and firm specific factors. Some of them affect directly while others affect indirectly. According to Lynch (1994), internal developments, world events, economic factors, hypes etc. are the main factors affect to stock market performance. In recent past political scientists and economists are increasingly interested in the interplay between politics and stock markets. According to Fuss and Bechtel (2002), different parties strategically manipulate the economy to benefit their voter's base to produce distinct stock market reactions. Considering these situations, this study examine how changes in political leadership of the country affect to the performance of stock market in Sri Lanka between the periods from 1994 to 2015.

1.1 Stock Exchange in Sri Lanka

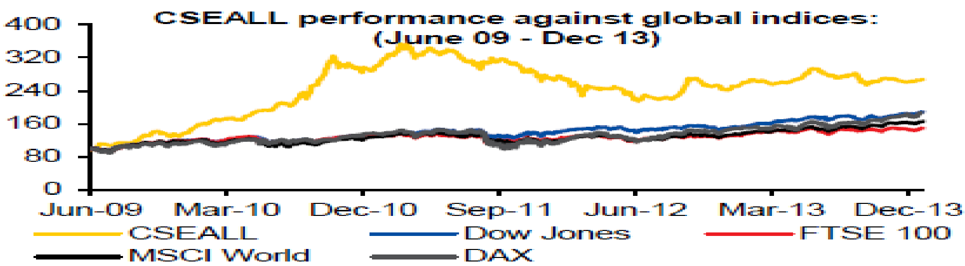
Colombo Stock Exchange (CSE) plays a vital role in Sri Lankan economy. Because it leads to growth of the key sectors in the economy and ultimately affects the growth of the entire economy of the country. CSE is one of the main stock exchange in South Asia which provides fully automated trading platform since 1985. As at 21st April 2015 CSE has 297 listed companies representing 20 business sectors, with a market capitalization of Rs.3, 014.49Bn. (Colombo Stock Exchange). Behaviors of All Share Price Index (ASPI) during the period from 1985 to 2012 is shown in below figure 1.

Figure: 1 Behavior of ASPI 1985 to 2012

Source: Colombo Stock Exchange

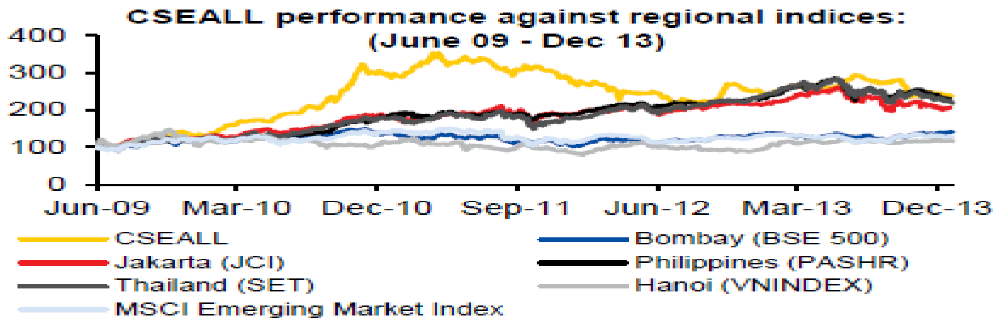
Sri Lankan stock market has shown an incredible growth of over 300%, during the post war era. End of conflict and future expectations of strong economic growth significantly uplifted the sentiment of investors, business community and the public at large since mid-2009 and Sri Lanka's Capital Market rallied for two consecutive years, with Bloomberg recognizing the CSE as one of the best performing markets globally, during the years 2010 and 2011. (*Capital market progress report-CSE).* Therefore, it is evidenced that Sri Lankan capital market has grown rapidly within a short time period after recovering from the civil war. Reasons for such a development are attraction of more local and foreign funds, encouraging trends of foreign participations, increased liquidity in the market etc. Due to these reasons during 2009-2012 All Share Price Index of Colombo Stock Exchange (CSEALL) has significantly outperformed some of major global and developed indices as shown in figure 2. During this period CSEALL also has significantly outperformed some of the best performing regional indices as shown in figure 3.

Figure 2- CSE Performance against Global Indices



Source: Bloomberg

Figure 3- CSE Performance against Regional Indices



Source: Bloomberg

Few key indicators of CSE over the period of 2009-2014 is shown in below table 1.

Table 1 - Capital Market Performance

	2009	2010	2011	2012	2013	2014 YTD
Market Capitalization (LKR Bn)	1,092.1	2,210.5	2,213.9	2,167.6	2,459.9	3,067.3
Daily Average Turnover (LKR Mn)	593.6	2,396.3	2,285.6	883.6	828.4	1,286.8
Market PE (x)	5.4	11.6	14.0	12.4	10.8	14.9
Market PBV (x)	1.7	3.0	2.0	2.1	2.0	2.1
DY (%)	3.0	1.2	1.8	2.4	2.9	2.4
No. of Listed companies	231	241	272	287	289	293

Source: Colombo Stock Exchange/ Bloomberg

1.2 Political Status of Sri Lanka

Sri Lanka assumed the status of a republic in 1972. A constitution was introduced in 1978 which made the executive president as the head of state. One of the key feature of political system in Sri Lanka was the existence of generally stable political parties for more than four decades since independence. As a result of that a two party system was emerged in which United National Party (UNP) and Sri Lanka Freedom Party (SLFP) were formed governments. But later several other political parties were formed, Such as Lanka Sama Samaja Party, Tamil United Liberation Front, Sri Lanka Muslim Congress etc. In 2004 the SLFP and few other political parties came in to an alliance and take part in to the election as one party, called United Peoples' Freedom Alliance (UPFA).

Since independence Sri Lanka continues to face major challenges, such as nearly three decades of civil war in the Northern and Eastern provinces, Tsunami that hit the Indian Ocean in December 2004 etc. Yet, despite the conflict, Sri Lanka's GDP per capita grew on average by 4% per annum between 1990 and 2009. Even though the country witnessed a decline in GDP growth in 2009 (to 3.5%), the economy has picked up largely due to the cessation of the war, increased agricultural production in the Northern and Eastern Provinces, the growth of the tourism sector (60% increase in 2011 compared with 2010) and increased Government spending on reconstruction. Sri Lanka's GDP grew by 8% in 2010 and 8.3% in 2011. (*UNDP – About Sri Lanka*).

Since 1978 two major political parties UNP and SLFP/ (United Peoples' Freedom Alliance) came in to power. But since 1994 until 2015 only the UPFA has obtained the majority power in the parliament. According to the general rule in the country a president can hold office for a period of six years from his appointment and can be re-appointed for another term. Accordingly, from 1994 to January 2015 there were two presidents in Sri Lanka. It should be noted that in Sri Lanka there is a tendency that succeeding president tries discontinued the previous government policies thereby introduced new set of policies. As a result of that, there were different set of policy frameworks applied by Sri Lankan government with the change of the presidency even though the same political party led the country. Therefore, this study attempts to examine the impact of these policy changes under different presidential terms to the performance of Sri Lankan stock market.

Table 2: Sample presidential terms

Presidential term	Period
1	December 1994 - December 1999
2	January 1999 - November 2005
3	December 2005 - January 2010
4	February 2010 - December 2014

Whenever the stock market goes turmoil, all keep accusing government and make the government responsible for chaos in stock market (Rahaman et al. 2013). This condition has no base as any formal study has not carried out in Sri Lanka regarding this issue. But the government cannot ignore their liability for any failure occurred in the stock market during their regime. Therefore, these factors motivated to do this study. Present study analyzed the performance of CSE under different political leadership in Sri Lanka. Sample period of the study is 1994 to 2014 which has been divided in to different presidential terms as shown in table 2 above.

2. LITERATURE REVIEW

Performance of the stock market is influenced by number of macro-economic factors, the major factors among them include the government intervention and the performance of the general economy. Several studies have been carried out in developed countries in order to examine the performance of stock markets before and after the general elections. Extensive studies also performed in America and Britain in order to examine the performance of the stock markets, based on the party of the president or prime minister in power. Some studies argue that the stocks market's performance and the president's political party affiliations are unrelated (Niederhoffer et al. 1970) and (Huang 1985). Researchers did not find any study performed in Sri Lanka to test the relationship between performance of stock market and the political party in power.

A comprehensive study was carried out by Rahman, Hashan, Ashan (2013), to examine the stock market performance under different political leadership in Bangladesh. The study mainly considered two different Dhaka Stock Exchange (DSE) daily indices' (DSI and DGEN) return and some key market indicators for the period from 20th March 1991 to 30th

April 2013. They have basically analyzed the average market return, volatility and risk for five government terms in Bangladesh individually. Based on the results of descriptive analysis and statistical analysis the study found that performance of stock market was superior under government which was led the country during the period from 2006 to 2009. In that period there was a non-political party or a caretaker government in Bangladesh. The study also found that stock market performance of Bangladesh was worst during the government period from 1996 to 2001 and from 2009 to 2001 respectively and these two government periods were led by same political party.

According to the 'Presidential Election Theory', US stock markets are weakest in the year immediately following the presidential election, then go up over the next three years with the third year typically the strongest of the four and the fourth year the second strongest of the four no matter who wins the election. Simply the theory states that, stock market trends can be predicted and explained by the four-year presidential cycle. History does give some credence to Hirsch's theory. However, modern presidencies have not borne it out. The Dow Jones Industrial Average rose in the years following the elections of George H.W. Bush and Bill Clinton, but the two elections of George W. Bush were followed by down years. After Obama's 2008 election, it went up. It is also important to note that the U.S. equity market tends to rise when the existing president going to re-elect, whether or not he wins. Since 1990, whether a popular president wins a second term or an unpopular one does not, the Dow Jones Industrial Average has averaged a return of 9% when the incumbent president seeks re-election.

In order to test the presidential election theory Wong and McAleer (2009), carried out a study in US and found that in general, stock prices fell during the first half of the presidency, reached a through in the second year, rose during the second half of the presidency, and reached a peak in the third or fourth year. In this study they mapped the presidential election cycle in US stock markets. Results of the study shown that this cycle trend is found to hold for the greater part of the administration period between presidents Lyndon Johnson to the administration of President George W. Bush. The empirical results suggest that the Republican Party may have greater cause to engage in active policy manipulation to win re-election than their Democratic counterparts. The existence of the Presidential Election Cycle shown in their study could constitute an anomaly in the US stock market, which could be useful for investors.

Rolend and Michel (2007), carried out a study in German to investigate the anticipated patrician effects of the Rational Partition Theory, which indicates, firms perform better under right than left leaning governments. Applying conditional volatility models the study analyze the impact of expected government partisanship of 2002 German federal election on stock market performance. Results of the study shown that small-firm stock returns were positively (negatively) linked to the probability of a right (left) leaning coalition winning the election. Moreover, the study found that volatility increased as the electoral prospects of right-leaning parties improved, while greater electoral uncertainty had a volatility-reducing effect.

The Political Policy Theory suggest that the policies of the political parties influence the performance of the stock market. Since different political parties have different general economic approach, the performance of the stock market during different political party's administration should be different. Alternatively, the Social Mood Theory suggests that the mood of society is reflected in the performance of the stock market. When it comes time to vote, this mood can be misattributed to the incumbent administration. If the mood is good, as reflected by high returns in the stock market, voters vote for the incumbent party. If mood is bad, as reflected by low returns, voters do not vote for the incumbent party. Nofsinger (2007), performed a study to examine two competing hypotheses, “Does the election of a U.S. president affect the performance of the stock market, or does the performance of the stock market effect who is elected as the president?” Results of the study suggested that, during the entire sample period from 1828 to 2004 the returns are an insignificant 2% per year larger in Republican administrations which indicates the election of a president does not seem to affect the performance of the stock market. However, the performance of the stock market before 3 years of the election is useful in predicting whether the incumbent party will win reelection.

3. METHODOLOGY

In this study relationship between stock market performance and the Presidential leadership during the period from 1994 to 2015 is measured basically Descriptive Analysis.
Under the descriptive analysis some key indicators of stock market were analyzed, these indicators include;

1. Turnover value in Rs. Million – Aggregate value of the trading deals.
2. Market capitalization in Rs. Million – Total value of the stock exchange
3. ASPI index in points – Measurements of movements of share prices of all listed companies
4. Turnover ratio (%) – (Total turnover/ market capitalization)*100. This measures the how often shares change hands.
5. Average market return of the period

During each of the presidential term growth of each of above indicators were observed. Under the descriptive analysis a graphical analysis of monthly ASPI values and monthly turnover of the CSE were also performed.
In addition to the above indicators descriptive statistics of market return also analyzed in each presidential terms. Monthly return of ASPI were used as a proxy for the market return. The ASPI is one of the principal stock indices of the CSE in Sri Lanka and it measures the movements of share prices of all listed companies in CSE. The monthly index return of month *t* was calculated using the simple return formula given bellow.

$$R_m = \frac{p_m - p_{m-1}}{p_{m-1}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \mathit{Formula}\ 01$$

Where, p_m = Value of the index at month *m*
p_{t-1} = Value of the index on month prior to month *m*

3.1 Data Collected and Sample Period
In this study sample data on required variables were collected from the period December 1994 to January 2015. This sample period also sub divided in to mainly four different presidential term, term-1 (from December 1994 to December 1999), term-2 (from January 2000 to November 2005), term-3 (from December 2005 to January 2010), term-4 (from February 2010 to December 2014).

Even though CSE has mainly two indices as ASPI and S&P SL 20 this study obtained only the monthly returns of ASPI. The ASPI is a market capitalization weighted index where the weight of any company is taken as the number of ordinary shares listed in the market (CSE).

4. DATA ANALYSIS AND RESULTS

4.1 Presidential Term I

Based on the above facts the table-3 depicts the performance of the Colombo Stock Exchange during the period 1994-1999.

Table 3 – Presidential term I

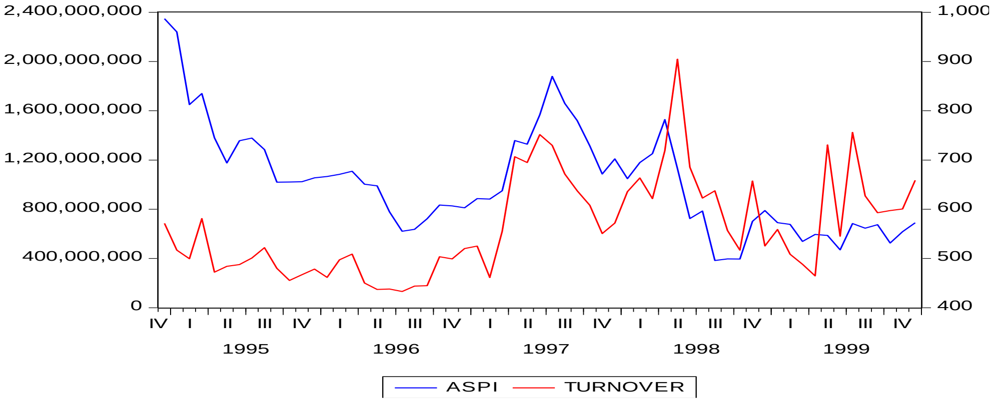
Indicators	**One Year Monthly Average Nov.1994-Nov.1995**	**One Year Monthly Average Nov.1998-Nov.1999**	**Change in %**
Turnover value in Rs. Million	1,044.25	1,203.43	15.24
Market capitalization in Rs. Billion	107.2	110.02	(8.71)
Turnover ratio (%)	0.8653	1.0923	20.46
ASPI index in points	790.96	557.62	(29.05)
Average market return of the period	(0.008061)		

Results of the descriptive analysis given in table 3 above shows that turnover value which represents the average monthly value of all trading deals of the period has increased by 15.24% during the first presidential term. Average market capitalization value has decreased by 8.71% during this term. Average value of CSE's ASPI index for first year of the term stood at 790.96 points and during last year of the term it was 557.62 confirming 29.05% decline. During the period turnover ratio has increased by 20.46%.

Chart 1 shows the monthly ASPI value and monthly turnover value. The highest ASPI and turnover value during the tenure were stood at 986.7 and Rs. 2,018,987,038.00 respectively. Whereas the minimum value of ASPI and turnover were stood at 496 and Rs. 131,776,386.00 respectively.

According to the statistical findings of 61 observations given in table-07, average return for this presidential term was (0.00806). Average return indicates the mean value of return that investors try to maximize at each level of risk. Standard deviation stood at 0.0674549.

Chart 1 – Presidential Term I



4.2 Presidential Term II

Table 4 –Presidential Term II

Indicators	**One Year Monthly Average Dec.1999-Dec.2000**	**One Year Monthly Average Nov.2004-Nov.2005**	**Change in %**
Turnover value in Rs. Million	968.4	9,035.6	833.06
Market capitalization in Rs. Billion	99.4	536.5	439.85
ASPI index in points	503.0	1,940.2	285.72
Turnover ratio (%)	0.9744	1.6842	72.83
Average market return of the period	0.01239		

According to table 4; on in first year of the term, average market turnover value stood at Rs.968.4 million which was stood at Rs.9, 035.6 in last year of the term, resulting to 833.06% growth. Average market capitalization of first year of the term stood at Rs.99.4 billion which has increased to Rs.536.5 in last year of the term, confirming 439.85% growth. ASPI index value also has went up by 285.72% during this tenure. Turnover ratio grew by 71.83%.

Chart 2 – Presidential Term II

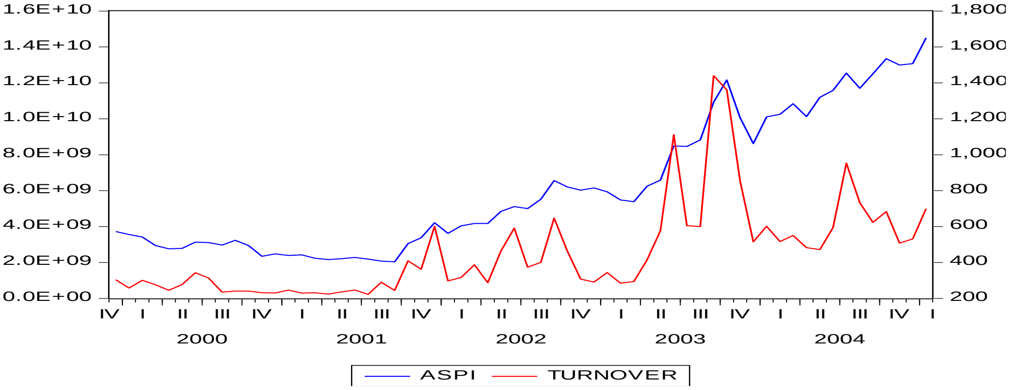


Chart 2 shows the monthly ASPI and market turnover value. The highest turnover value and ASPI value were Rs.12,400 billion and 2,516.5 respectively during this period. According to the statistical analysis given in table 7 total 71 observations were used during this government term. Mean return for the period was 0.0224 and standard deviation stood at 0.0764.

4.3 Presidential Term III

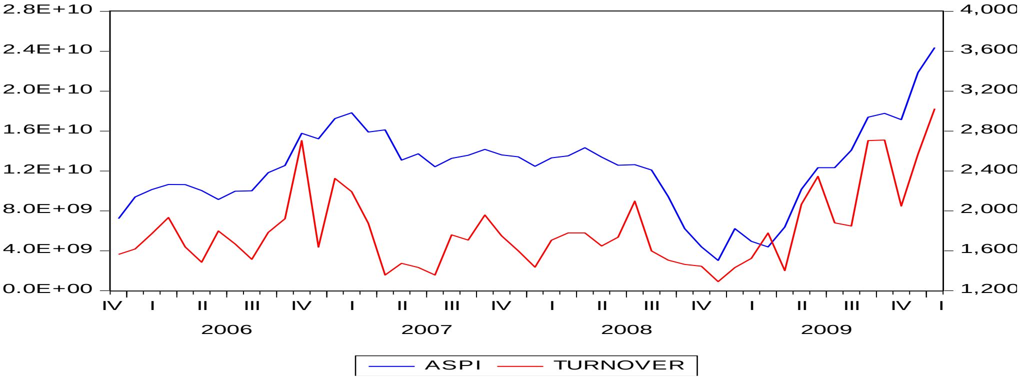
According to the figures given in table 5, first year of the term showed an average market turnover value was Rs.8,471.7, which stood at Rs.11,061.7 in last year of the term, representing 30.57% growth. Relating to the average market capitalization, there was a 7.87% growth from first year of the term to last year. ASPI index value also has grew by 1.82% during the same period under consideration. Turnover ratio also represented a positive growth of 21.05% during the period. During this term the investors could earn 0.01239 average market return.

Table 5 – Presidential Term III

Indicators	**One Year Monthly Average Dec.2005-Dec.2006**	**One Year Monthly Average Dec.2008-Dec. 2009**	**Change in %**
Turnover value in Rs. Million	8,471.7	11,061.7	30.57
Market capitalization in Rs. Million	700.9	756.0	7.87
ASPI index in points	2,296.4	2,338.3	1.82
Turnover ratio (%)	1.2087	1.4631	21.05
Average market return of the period	0.01239		

Chart 3 shows the monthly ASPI and market turnover value. The highest monthly turnover value and monthly ASPI value were Rs.18,238 billion and 3,636.4 respectively during this period. According to the statistical analysis given in table 7, total 50 observations were used during this government term. Mean return for the period was 0.012392 and standard deviation stood at 0.080663.

Chart 3 – Presidential Term III



4.3 Presidential Term IV

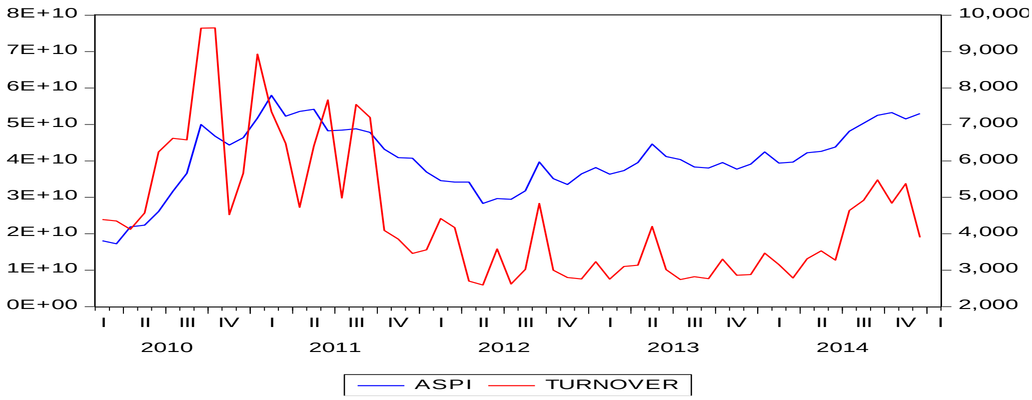
As per the table-6 from first year to last year of the term there was 44.72% negative growth of average market turnover value. Average market capitalization had a positive growth of 59.22% during this government term. ASPI index average value also has shown a positive growth of 24.46%, but the turnover ratio had a negative growth of 65.27% during this period.

Table 6 – Presidential term IV

Indicators	**One Year Monthly Average Jan. 2010-Jan.2011**	**One Year Monthly Average Dec.2013-Dec.2014**	**Change in %**
Turnover value in Rs. Million	49,220.1	27,211.0	(44.72)
Market capitalization in Rs. Billion	1,743.1	2,775.3	59.22
ASPI index in points	5,303.7	6,601.2	24.46
Turnover ratio (%)	2.8237	0.9804	(65.27)
Average market return of the period	(4.14975)		

Chart 4 shows the monthly ASPI and market turnover value. The highest monthly turnover value and monthly ASPI value were Rs.76,497.12 billion and 7,798.0 respectively during this period. According to the statistical analysis given in table 7, total 59 observations were used during this government term. Mean return for the period was (4.14975) and standard deviation stood at 22.53787.

Chart 4 – Presidential Term IV



Descriptive statistical findings of return calculated by applying simple return formula given in formula one have been shown in following table 07.

Table 7- Descriptive Statistical Findings

Descriptive Statistical Findings				
Statistical Findings	**Term 1**	**Term 2**	**Term 3**	**Term 4**
Mean	(0.0080611)	0.022499154	0.012392	(4.14975)
Median	(0.0004007)	0.015827517	0.007726	(1.01485)
Standard Deviation	0.0674549	0.076443172	0.080663	22.53787
Coefficient of Variance	0.00455016	0.005843558	0.006507	507.9557
Kurtosis	0.44709576	0.863554032	0.418331	52.76123
Skewness	(0.0487779)	0.542606127	0.33517	(7.09748)
Maximum	0.16015686	0.252725471	0.21172	16.47665
Minimum	(0.1682039)	(0.148333804)	(0.16151)	(169.859)
Number of Observation	61	71	50	59

5. CONCLUSION

By referring to market indicators given for all government terms and descriptive statistical findings given in table-7 above it reveals that government term II has shown a better performance compared with other terms. As given in table 4 during this government term there is a comparatively positive growth of all market indicators including market turnover, market capitalization, ASPI index value and turnover ratio. According to the statistical analysis given in table 7 it also revealed that among four government terms term II has the highest mean and median return (0.0224 and 0.0158) where the term IV has lowest mean and median return (-4.149 and -1.014). On the other hand, government term II also has law volatility or risk, since its standard deviation is only 7.64%. This term also has a low value for the coefficient of variance, which measure the risk per unit of return of 0.58. It should be noted that even though government term I has the lowest risk and volatility of return, since it has the lowest value for standard deviation and coefficient of variation, this term has negative mean and median return.

When it consider about the political status of the country under this presidential term, it should be noted that from 1999-2001 the people's alliance party was governing the country. But from the parliamentary election that was held in 2001 the United Nation Party won the legislative power. Therefore, from 2001 to 2005 majority power of the parliament was with the United Nation Party

It is also important to note that as shown in chart 3 there was a down turn of stock market performance of Sri Lanka during mid-2009 due to civil war. But during post war period the stock market showed rapid growth. Even though such an implausible growth was there in the stock market after the war there was a high volatility of return, as shown in chart 4 and table 7. Therefore, finally it can be concluded that Sri Lankan stock market has shown a better performance during the government term II (January 1999- November 2005).

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