The Presidential Election Cycle: Examining the Stock Market Return Patterns in the 21st Century

Biqing Huang[*]**, Christian Garcia**[**] **and Yanli Zhang**[***]

[*]*Corresponding author, Department of Accounting, Economics, and Finance, Angelo State University, San Angelo, TX 76909, Email: biqing.huang@angelo.edu*
[**]*Angelo State University*
[***]*Feliciano School of Business, Montclair State University, Montclair, NJ 07043, Email: zhangy@mail.montclair.edu*

ABSTRACT

With the vigorous development of Chinese foreign trade, China's demand for high-quality imported fresh fruits is rising. However, the high decay rate of imported fresh fruits has brought huge losses to the owner enterprise. In this paper, it is aimed to reduce the rate of rot and loss of imported fruits and improve the utilization rate of resources. For this purpose, the service mode of the cross-border supply chain is analyzed and the overseas warehouse layout of fresh fruits imported by enterprises is put forward. PESTEL model was used to analyze the factors influencing the location of target countries, and the specific location selection of overseas warehouse was analyzed and modeled from the macro and micro angles. According to the location for enterprises, choose the corresponding overseas warehouse construction mode. This study suggests that the enterprises should build the imported warehouse and pre-cool the fresh fruits in an overseas exporting country, and control the quality of fresh fruits from the source, so as to slow down the rapid decay and damage of fresh fruits.

INTRODUCTION

For the past 40 years financial scholars have argued about the existence of a Presidential Election Cycle. The Presidential Election Cycle theory has revealed a repeating pattern in each year of an administration: year one and two consistently revealed declining returns on equities while year three and four produced positive returns. The Presidential Election Cycle has become a controversial topic because it opposes the weak form of the Efficient Market Hypothesis. If the Presidential Election Cycle holds true and patterns exist within presidential terms, then the markets may not be efficient. If a pattern exists, then it is possible for investors to profit from the Presidential Election Cycle. The purpose of this paper is to continue the research by examining if patterns exist within the first four presidential terms of the 21st Century.

LITERATURE REVIEW

This section summarizes the results of past research on the Presidential Election Cycle. It is worth noting that the most recent article on this topic was published in 2009, which highlighted differences in stock market returns produced by Democratic versus Republican presidents. The lack of recent published financial literature in this area created a challenge but also presented an opportunity for further contribution.

2.1 The Presidential Election Cycle

The Presidential Election Cycle has been a topic of interest for financial scholars because of the implications

such a cycle may have on financial markets and investor returns. The existence of a Presidential Election Cycle can provide investors with advantageous market timing. Many scholars have published on the topic and have even made an argument that this pattern disproves the weak form of the Efficient Market Hypothesis, i.e. investors cannot consistently profit from using trading rules. Other scholars have utilized the data to investigate which political party best stimulates the economy.

One of the first contributions in the literature about the Presidential Election Cycle came from Dr. Roger D. Huang (1985). In his research, Dr. Huang discovered an anomaly which he referred to as the Presidential Election Cycle. Dr. Huang utilized six time cycles ranging from the early 1900s until the late 1980s and found that the existence of the election cycle became much more apparent in every one of the six periods. He identified a cyclical pattern that would produce less risk for an investor and displayed higher returns in years three and four of a presidential term. The pattern that Huang observed would be advantageous to investors because they could consistently expect the market to move in favorable directions in year three and four of a presidential term and unfavorable directions in year one and two.

Allvine an O'Neil (1980) studied stock returns by examining the Presidential Election Cycle. They tested the concept of a four-year political business cycle that is based on the strong incentive for politicians to stimulate the economy prior to a presidential election and to pursue deflationary policies following the election. They found that the annual returns rose 22 percent two years before the election, 9.2 percent in the year before the election, 0.6 percent in the year immediately following the election, and 0.7 percent in the second year following the election. They concluded that the market may not be efficient because there are limits to processing information, and therefore endorsed a four-year election cycle in stock prices as a powerful alternative to the Efficient Market Hypothesis.

To continue the work of Allvine and O'Neil, Stovall (1992) examined the returns of the Presidential Election Cycle throughout the entire 20th century. Stovall found that his results of returns matched the cyclical pattern discovered by Allvine and O'Neil. Further, Stovall offered an interesting explanation for the Presidential Election Cycle: an administration and the Federal Reserve were generally at their tightest during the early quarters and at their most accommodating during their late quarters in terms of fiscal and monetary policy.

Gartner and Wellershoff (1995) also conducted a series of experiments that led them to support the existence of a Presidential Election Cycle. They claimed that since the inauguration of John F. Kennedy mean reversion tendencies and aversion tendencies could be exploited because of the cyclical pattern. They determined that profit opportunities exceed any cost that might prevent stock market participants from taking advantage of the pattern. Hensel and Ziemba (1995) found that the 48-month political/economic cycle produces peak returns in the November of presidential elections. Additionally, they stated that these findings are consistent with the hypothesis that political reelection campaigns create policies that stimulate the economy and are positive for stock returns.

Pedro and Valkanov (2003) found that returns coming from the presidential cycle were unanticipated by administrations and public/private perception. Though the returns were unanticipated, these authors state that investors should not ignore the presidential cycle because of its ability to predict returns in the third and fourth years of presidential administrations. Wong and McAleer (2009) utilized data from 1965 to 2003 to test the four-year Presidential Election Cycle. Their results have been consistent with past literature: stock prices fell during the first half of the presidency, reached a trough in the second year, rose during the second half of the presidency, and reached a peak in the third or fourth year.

2.2 Democratic versus Republican Presidents

Scholars and citizens alike have wondered which political party has produced the best returns on the stock market. Research on the Presidential Election Cycle has allowed new information to be discovered about the differences in market movements and returns produced by Democrats and Republicans. Some researchers have made an argument that each party tends to cater to a certain sector(s) of the economy: e.g. Democratic administrations tend to focus on small business while Republican administrations tend to serve big business.

Leblang and Mukherjee (2005) assumed that traders

anticipate higher (lower) inflation under a left-wing (right-wing) incumbent party, so they rationally expect a decline (increase) in the real returns of stocks when the left (right) party wins elections and assumes office. They found that under left-wing administrations the stability of the stock market increases but under right-wing administrations the economy produces a positive impact on stock returns and income growth. They also suggested that right-wing administrations are better at creating income growth but in most cases for the top one percent which leads to income inequality.

Snowberg *et al.* (2006) researched the influence Congress has on the economy by utilizing security returns and financial market responses. They found that the market performed better under Republican majorities, but the effects were uniformly small, and substantially smaller than responses to news about changes in the party president. The sustainably small changes support the notion that Congress has little influence on economic activity or at least less than the president. Snowberg *et al.* (2007) further argued that macroeconomic supply shocks might reflect partisan preferences because parties have different intrinsic policy goals. They also suggested that investors may need to be aware of party preferences to different sectors of the economy.

Bialkowski and Gottschalk (2007) investigated which party is best equipped to nurture capital markets and the economy by utilizing a large set of international data. They used 24 countries in order to extend empirical analysis beyond a single stock market. Their results showed that the U.S. tends to be an anomaly in regard to the political election cycle and that investors should be wary of investing based on the political orientation of the country's leadership. Jones and Banning (2009) utilized market returns over a period of 104 years in order to investigate possible relationships between stock market performance and various occurrences in American elections. They found that market returns do not appear to vary based on partisan control of the government and neither election results nor the election cycle appear to offer much help in predicting stock market returns. However, they did find market returns are higher when real GDP growth is higher, and that higher GDP growth is correlated with Democratic control of government and market returns are higher when inflation is lower, and that lower inflation is correlated with Republican control of government. Though correlation exists, market returns and political control do not share a statistically significant relationship. They suggested that there is very little evidence to support investing based on the president's political party.

DATA AND METHODOLOGY

The purpose of this paper is to add to the existing literature by calculating stock market returns of the S&P 500 and Nasdaq index in order to identify return patterns during a presidential term: the existing literature has only analyzed market movements and returns of the 20th century, while this research will continue to analyze market returns of the 21st century.

Four indices were selected to test the following two questions: (1) does a cyclical pattern exist within the four-year terms of 21st century presidential administrations and (2) are there differences in market returns between Democratic and Republican administrations?

(1). S&P 500: an index that is widely regarded as the best measure of large cap equities. The index is a market value weighted index with each component stock's weight being proportionate to its market value.

(2). Nasdaq Composite Index: a large cap index that measures most of the technology sector. The Nasdaq Composite Index contains technology, internet-related, financial, consumer, biotech, and industrial companies that trade on the Nasdaq exchange. It is a market value weighted index, with each company's weight being proportionate to its market value.

(3). Russell 1000: a large cap index that measures 1000 largest companies in the U.S stock market. The Russell 1000 comprises over 90% of total market capitalization of all listed U.S. stocks, and is considered a bellwether index for large cap investing. The Russell 1000 is a much broader large cap index than the S&P 500 and is market capitalization-weighted.

(4). Russell 2000: an index that serves as the benchmark for US small capitalization stocks, measuring 2000 small cap companies. The index is also market capitalization-weighted. The Russell 2000 is included in order to have a small cap representation of the market.

All the data are downloaded from Yahoo Finance,
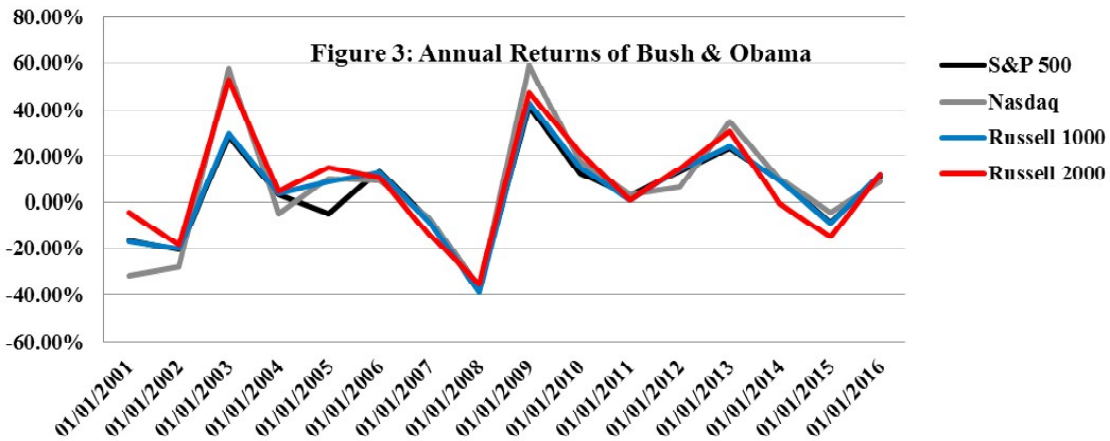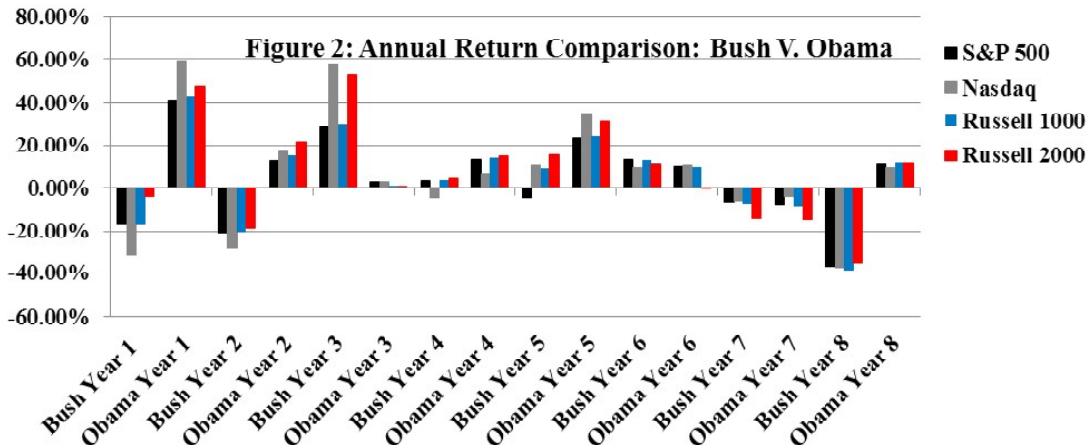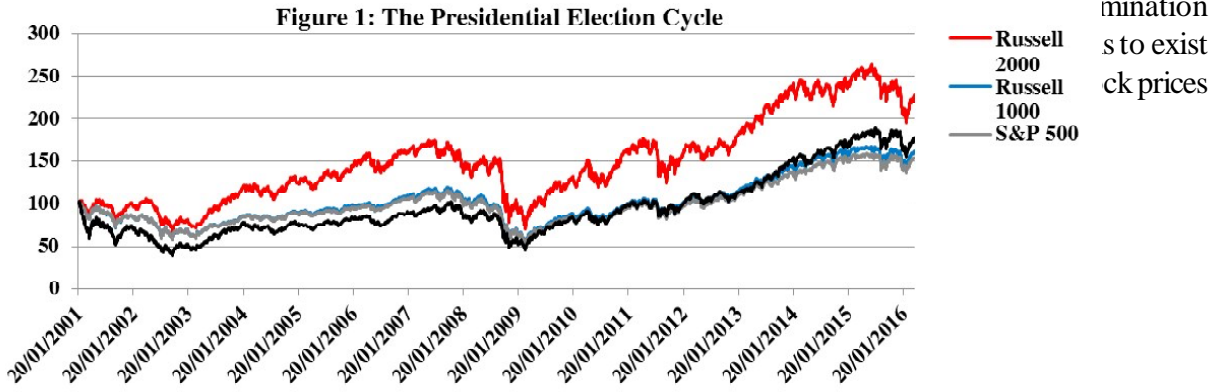
and the holding period return is calculated as:

$$HPR = \frac{Ending \; adj. Close - Beginning \; adj. Close}{Beginning \; adj. Close}$$

RESULTS AND DISCUSSION

Scholars and citizens alike have wondered which political party has produced the best returns on the stock market. Past results have shown that Democratic administrations tend to focus on small cap markets while Republican administrations tend to service large cap markets. This section discusses our findings for the first four presidential terms in the 21st century.

Figure 1 depicts the performances of the four indices

Figure 1: The Presidential Election Cycle

Figure 2: Annual Return Comparison: Bush V. Obama

Figure 3: Annual Returns of Bush & Obama

Table 1: Annual Returns under George W. Bush

George W. Bush	First Term				Second Term			
Indices	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
S&P 500	-16.65%	-20.70%	28.29%	3.22%	-4.75%	13.40%	-7.36%	-36.73%
Nasdaq	-31.74%	-27.78%	57.45%	-4.75%	9.86%	9.06%	-6.49%	-37.14%
Russell 1000	-16.94%	-20.28%	29.66%	3.45%	8.86%	12.82%	-8.09%	-38.71%
Russell 2000	-4.23%	-18.38%	53.03%	4.43%	15.07%	10.41%	-13.68%	-35.43%

Table 2: Annual Returns under Barack H. Obama

Barack H. Obama	First Term				Second Term			
Indices	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
S&P 500	41.33%	12.50%	2.74%	13.47%	23.53%	9.69%	-8.07%	10.78%
Nasdaq	59.02%	18.03%	3.05%	6.60%	34.81%	10.15%	-3.93%	8.90%
Russell 1000	43.20%	15.04%	1.08%	13.96%	24.33%	9.22%	-8.79%	11.71%
Russell 2000	47.49%	21.65%	0.84%	14.61%	30.75%	-0.47%	-14.61%	11.85%

Table 3: Differences in the Returns: George versus Barack

Difference in Returns	First Term				Second Term			
Indexes	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
S&P 500	57.98%	33.20%	25.55%	10.25%	28.29%	3.70%	0.71%	47.50%
Nasdaq	90.76%	45.81%	54.40%	11.35%	24.94%	1.10%	2.55%	46.05%
Russell 1000	60.14%	35.32%	28.58%	10.51%	15.46%	3.60%	0.69%	50.42%
Russell 2000	51.72%	40.02%	52.19%	10.18%	15.68%	10.88%	0.93%	47.27%

Numbers in red: George Outperforms Obama X%
Numbers in blue: Barack Outperforms Bush X%

Also, the Russell 2000 outperformed all other indexes because it is small cap based which translates to higher risk leading to higher return. The S&P 500, Russell 1000, and Nasdaq Composite Index followed a similar trend because they are all large cap indices.

Figure 2 examines annual return differences between the Bush and Obama administrations: stock returns on average were lower and tend to be more volatile during the Bush years. Year eight of Bush displays the brunt of the financial crisis and great recession, and positive returns in year one of Obama displays investor confidence in a president who promised change and stricter financial regulation.

Figure 3 plots the annual returns of the Bush and Obama administration: it shows the presidential election cycle still holds in the 21st century except the first term of Bush administration, which may be due to the burst of tech bubble in early 2000.

Table 1 shows the annual returns for the eight years of Bush administration: the four indices performed poorly in all years except three, five, and six. Examining the two terms of Bush presidency, an investor could utilize the Presidential Election Cycle to gain abnormal profits assuming year three of each term is the high point of the market.

Similarly, Table 2 shows the annual returns for the eight years of Obama administration: the four indices performed very well in all years except year seven. Examining both terms of the Obama administration, an investor again could utilize the Presidential Election Cycle to gain abnormal profits.

Table 3 shows the differences in stock returns between Bush and Obama years. Obama outperforms Bush in every year except year three and partially loses in years six and seven: the uptrend in the first two years of Obama presidency was much stronger than Bush presidency while the downtrend in the third year of Bush administration was tempered compared to Obama administration.

In conclusion, the Presidential Election Cycle hypothesis still holds in the 21st century. Investors may have been able to utilize the cyclical pattern as a trading strategy to outperform the market. Also, when comparing the stock market returns under Democratic versus Republican administrations, President Obama produced better returns than President Bush. But with only one pair of data points, no definitive conclusion can be drawn

regarding the stock market performances under Democratic versus Republican administrations.

Further research may examine a more extensive data set and explore possible cycles longer or shorter than 48 months. The effects of globalization and interest rates on the stock market may be included to discern the underlying factors driving the Presidential Election Cycle. There is also a need to examine economic policy taken by the previous administration which may have an influence on the existence and continuation of the cycle.

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