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Healthcare Stocks and Presidential Elections

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Presidential Elections and Health Care Stocks

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Paul College Honors Thesis

Abstract:

In this study I examine the impact presidential elections have had on health care stock returns. Through my own data collection and analysis, I sought to examine the performance of stocks across election cycles in addition to the performance of healthcare stocks across election cycles. Using data from 1998-2019 I find that 1.) In election years, the stock market underperforms relative to non-election years; 2.) Healthcare stocks underperform the broader market during election years; 3.) The impact on healthcare stocks is consistently poor in election years yet contained to only that year; 4.) The Presidential Election Cycle, stating that stocks underperform in the first half of a presidential term and underperform in the back half, does not fully hold true in the twenty-first century. I attribute the results to the fact that health care stocks are further affected by political developments and regulation in addition to a significant increase in media coverage surrounding presidential elections in the twenty-first century. As healthcare becomes a larger part of the US economy, the necessity for the government to step in and regulate has increased dramatically in the past few decades, leading to stocks in the sector being more susceptible to changes in government and policy. As society has entered a new age of technology and media, coverage of political events has increased dramatically leading to more coverage, opinions and rhetoric surrounding elections. This has caused traders to react more heavily to events surrounding the political arena throughout the year, driving underperformance in the market and in healthcare stocks.

Research Objectives:

The purpose of this paper is to explore the performance of the stock market in election years. According to Wall Street folklore, stocks typically perform better in the first two years of a president's term, on average, than they do in the last two years, a theory called the Presidential Election Cycle theory. Looking at data in the modern era, inferences can be drawn about the relationship between election cycles and their impact on the market. In addition, further inferences can be drawn about the election cycle's impact on healthcare stocks in particular and the reasoning behind their performance. By studying this we can draw relationships between different variables to determine why there is a significant variance in elections years. The discrepancy in stock prices in healthcare and in the general market throughout election cycles could prove an anomaly and be useful for investors. The questions I hope to answer are as follows:

1. How do stocks perform in election years? Does the Presidential Election Cycle theory hold true in recent years?

2. How do health care stocks perform during elections?

3. Is the impact on health care stocks transitory or permanent?

4. What are the fundamental drivers that impact performance of health care stocks in election years?

Literature Review

Stock markets are historically cyclical, constantly moving through peaks and troughs as the business cycle begins and matures. These cycles have been attributed to many different things historically including the January Effect, the Lunar Cycle and the Presidential Election Cycle. The Presidential Election Cycle, originally developed by Yale Hirisch in 1968, states that the U.S stock market performs weakest in the first year of a president's given term. According to Hirisch, this poor market performance is caused by the president switching between "policy" and "campaign" mode. In the first half of a term ,the president pursues policy that they ran their campaign on, which is often not conducive to economic stimulus (Leherr, 2019). This historically leads to underperformance in the first two years of a term as the market is often considered a proxy for economic health. In the latter half however, party or candidate re-election becomes a priority and policy switches to promote economic health to boost voter morale ahead of election day, driving performance in the stock market. Therefore, the cyclicality of the election cycle is complete with underperformance in the first half and outperformance in the second half.

Stock Market Returns and the Presidential Cycle by Fred C. Allvine and Daniel O'Neal argues that there has been a major economic shift that has taken place where economies have begun to expand prior to elections and contract thereafter. Their study, which covered between 1948-1978 found that on average, the market returns 22.1% in the two years prior to an election, 9.2% in the year prior, 0.7% immediately following the election, and 0.6% two years following the election. This represents a clear dislocation in returns across an election cycle and gives merit to Hirish's observations from the middle of the century. A later study by Wong and

McAleer (2009), examining years 1963-2003, confirmed the findings showing that "in general stock prices fell during the first half of a 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". The results by Wong and McAleer (2009) suggest that the Presidential Election Cycle thesis can be translated across a variety of time periods.

Another reason offered in the press is that manipulation is the culprit of the differences in returns throughout a presidency. "More often than not, the incumbent government can try to manipulate economic policies in both the macro and micro spheres in order to achieve specific political goals, including re-election" (Wong, McAleer, 2009). Whether or not the discrepancy in market returns across election cycles is due to manipulation is not the basis of this study, but it does aid in the confirmation of the cyclicality of returns.

There is rhetoric surrounding the thought that markets prefer a Republican candidate to win the election. However, a 1985 study by Roger D. Huang, *Common Stock Returns and Presidential Elections*, examines this issue, finding that returns are not significantly different between party administrations (Huang, 1985). Returns across the board followed similar patterns regardless of the executive in power, leading to the assumption that any cyclicality in markets surrounding election cycles will persist regardless of the party victor.

This change in the business cycle around election periods brings to light the continued underperformance of healthcare stocks in particular. A *Wall Street Journal* piece by Karen Langley demonstrated the consistent underperformance of certain sectors throughout the course of a year that an election takes place. Stating "the health-care and technology segments

of the S&P 500 typically suffer their worst performance of the four-year election cycle during the years Americans go to the polls to name a president" (Langley, 2020). Despite healthcare being largely considered a defensive sector, one that is not heavily affected by changes in economic demand, it is largely subject to changes in policy. Therefore, it is implied that the change in healthcare performance does not have the same drivers as the overall underperformance of the market.

The healthcare sector consists of businesses that provide medical services or insurance, manufacture medical equipment or drugs, or otherwise facilitate the provision of healthcare to patients. Demand for healthcare products and services is largely price inelastic and effected limitedly by changes in the economic environment. Historically, however, government intervention in the sector has been pervasive (Cook, 2020), especially as health care expenditures have grown to account for a larger and larger part of United States Gross Domestic Product, rising from 5% in 1960 to 17.8% in 2019, according to CMS.gov. The sector has exceptionally high barriers to entry due to regulation, proper licensing, spending on research and development and major economies of scale. IT currently accounts for the second largest sector in the S&P 500 behind information technology and has been the overwhelming focus of political campaigns in recent elections.

National Health Expenditures as % of GDP
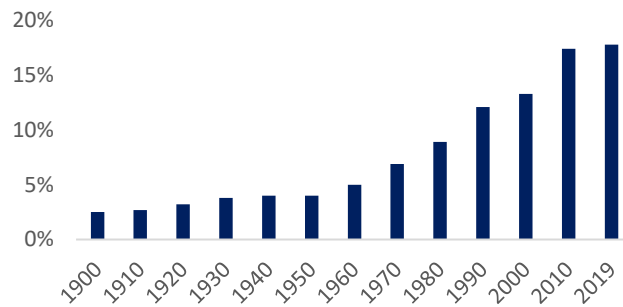
Extreme volatility occurs around times of significant uncertainty, for example national elections. Investors are unable to make inferences about the future and trading picks up surrounding every headline. In a 2008 paper, *Stock Market Volatility Around National Elections,* the extreme pickup in volatility surrounding elections is explored. Across all 28 OECD countries studied, there is a significant and noticeable pickup in volatility across the entire market following the election for at least 15 days (Gottschalk & Wisniewski, 2008). Elections cause uncertainty regardless of the outcome, regardless of the country the election takes place in.

This study seeks to understand the cyclicality of markets and their pervasiveness during the modern era in both healthcare stocks and the general market. Cycles in markets are subject to change based off a variety of factors. Both politics and the healthcare system in the United States have changed drastically since the beginning of the century and the correlations between one another may have changed significantly.

Data

Stock return data present in this study is from Dow Jones via Bloomberg. Various indices can be used to track stock market data and data reflective of the general market. In order to

track healthcare stock returns in this study, the Health Care Sector Select (IXV) from S&P Global is used. This seeks to track major economic segments which are highly liquid through a market cap weighted index, in this case healthcare. In order to track stock market returns, used as my control, I used the S&P 500 index (SPX). This is widely regarded as the single best gauge of large-cap US equities and seeks to track the performance of the largest 500 companies by market cap (S&P Global). In gathering data, returns were calculated annually, quarterly and daily for different variables tested. No matter the period tested however, prices were always calculated as end of day. Data was calculated over the course of twenty-one years (1998-2019) and five elections. Annual returns are based on calendar years as opposed to election cycles meaning an election year is Jan 1-Dec 31 of the given year the election takes place in. Each year designated as an election year is the entirety of the calendar year for which the election falls. For example, if an election falls on November 6, 2016, the delegated election year is that between January 1, 2016 and December 31, 2016.

General Results

Looking at data from 1998-2019, the SPX underperforms in election years relative to non-election years. Including 2008, where the Great Financial Crisis occurred, the SPX underperforms by 1,260 basis points in election years and underperforms by 381 basis points when excluding 2008.
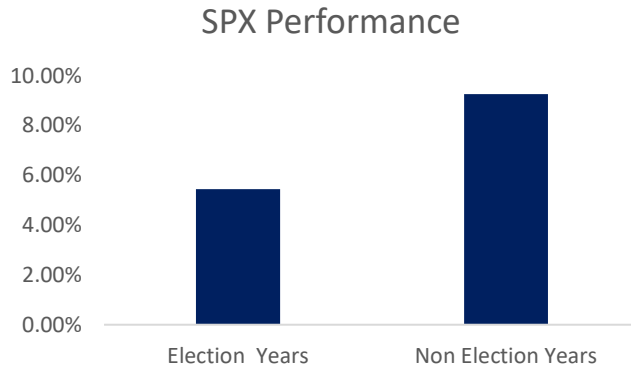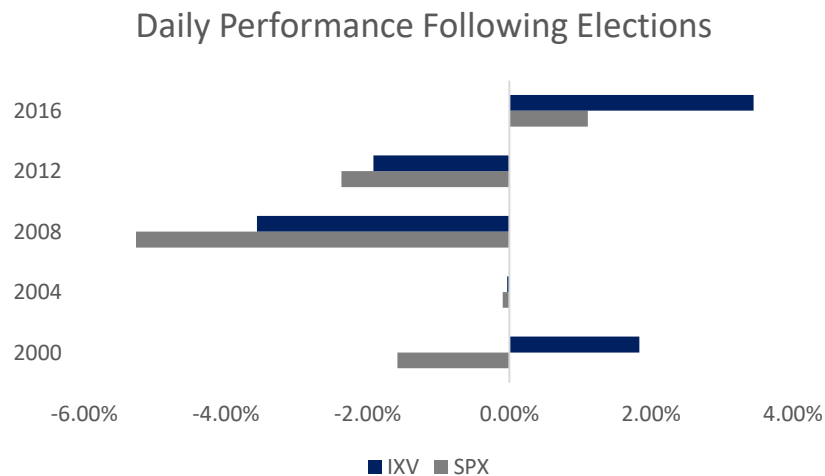
SPX Performance

Even more extreme is the underperformance of health care stocks in election years, lagging the S&P 500 by approximately 570 basis points, returning a total return of -25 basis points. This is the largest underperformance of any sector across the entire market and the only sector to return a negative percentage. This shows a clear dislocation in election specific years. When looking outside of election years in the time period since 1998, the SPX returns 6.26% annually on average where the IXV returns 7.55% annually on average.

Election Year Returns (Ex-2008)
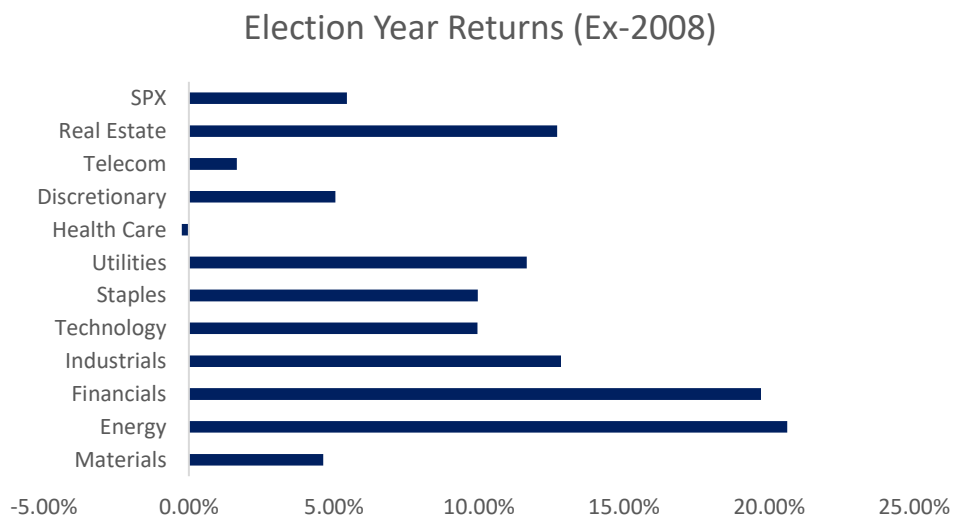
This result is surprising given the healthcare sector relatively low beta to the S&P 500 historically, at roughly 0.82 according to CNBC. The sector is largely regarded as a defensive sector where investors can park their capital and expect consistent cash flows and demand despite economic conditions.
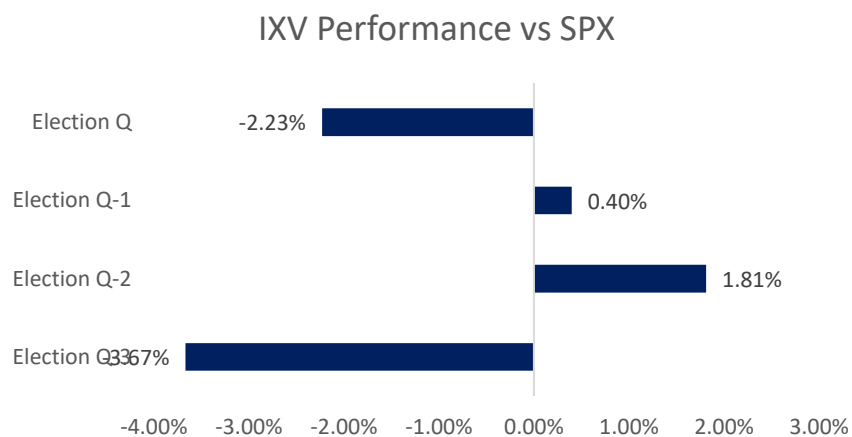
Additional Results

Despite the continued, significant underperformance of the healthcare sector in election years, it has outperformed the broader market 100% of the time the day following a general election dating back to 1998. This is regardless of the party of the victor, whether the result was expected and regardless of the performance of the SPX. This likely shows the cyclicality of the market during election cycles is not being accurately priced in by investors, instead, they seem to flock to more defensive investments with fortress business models that can withstand uncertainty, such as healthcare businesses.

Daily Performance Following Elections

This also presents evidence that the general election itself is not the main driver in the underperformance of healthcare stocks in election years. Instead, we can see that the

underperformance of these stocks is not evenly distributed throughout the year, on average.

There is very material underperformance in the first and fourth quarters of election years,

where there is outperformance in the second and third quarters. The underperformance in the

first and fourth quarters coincides with the time periods of both the primary elections and the

general elections. Even more interesting is the fact that the underperformance in the first

quarter is even more pronounced in years where there is no incumbent president. The

underperformance in years without an incumbent president is 95 basis points greater in the

first quarter, on average, than those with an incumbent president. No sitting president provides

greater uncertainty for the market as a whole, especially for healthcare stocks whose future

hangs in the balance of the person holding the executive.

IXV Performance vs SPX

Election Q	-2.23%
Election Q-1	0.40%
Election Q-2	1.81%
Election Q-3	-3.67%

-4.00% -3.00% -2.00% -1.00% 0.00% 1.00% 2.00% 3.00%

The dislocations in these given quarters are likely driven by a massive increase in trading

volume. In election years, there is a significant increase in trading volume during the first and

fourth quarters over the second and third quarters. This is a trend that was very apparent over

every election cycle studied. As policies, debates and results become apparent, traders are

further encouraged to move volume in response to those developments. This follows along the

trend of there being less significant political news and headlines overall in the second and third

quarter of election years, leading to the lower overall trading volume in both the SPX and XVI.

## SPX Trading Volume by Year
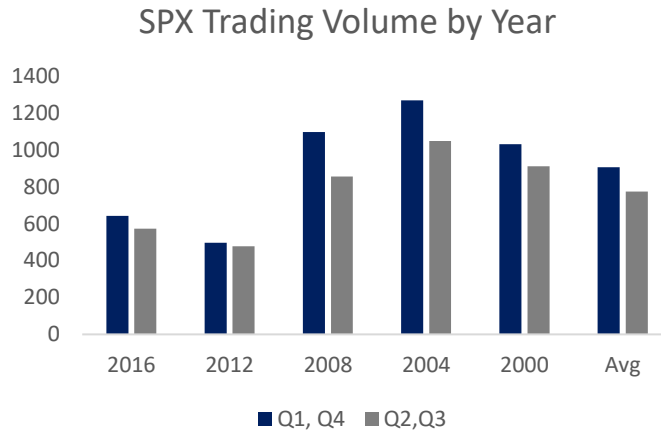
The variance in returns for the SPX shows an interesting pattern. In the SPX, the market

has strong years in election year +1 and election year +3, returning 12.93% and 12.49%

respectively. Alternatively, in the election year and election year +2, the SPX drastically

underperforms the other years returning 5.45% and 1.64% respectively, on average. This

disagrees with the Presidential Cycle theory due to the massive outperformance in election

year +1, where the market is historically expected to trough, rather than peak.

SPX Performance by Year
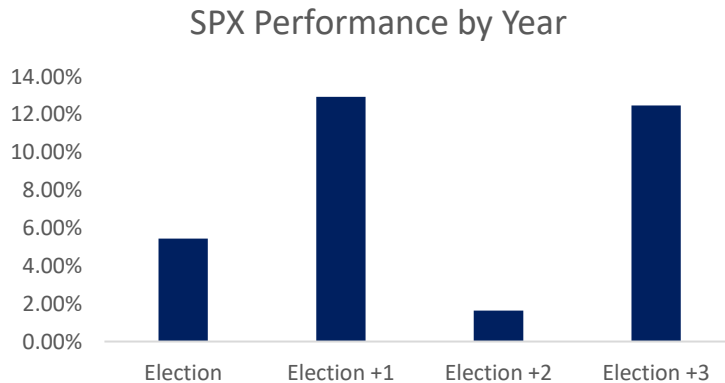
The XVI, on the other hand, underperformed in a different pattern than the SPX did

relative to itself. In the election year and the year following, the XVI underperformed the SPX by

5.69% and 1.10% respectively, on average. However, in Election Year +2 and Election Year +3, the XVI outperformed the SPX by 5.05% and 3.50% respectively, on average. The XVI follows a similar pattern to what is expected out of the Presidential Cycle theory, on average, reaching a trough in the second year and climbing to a peak thereafter.

IXV Performance Relative to SPX by Year
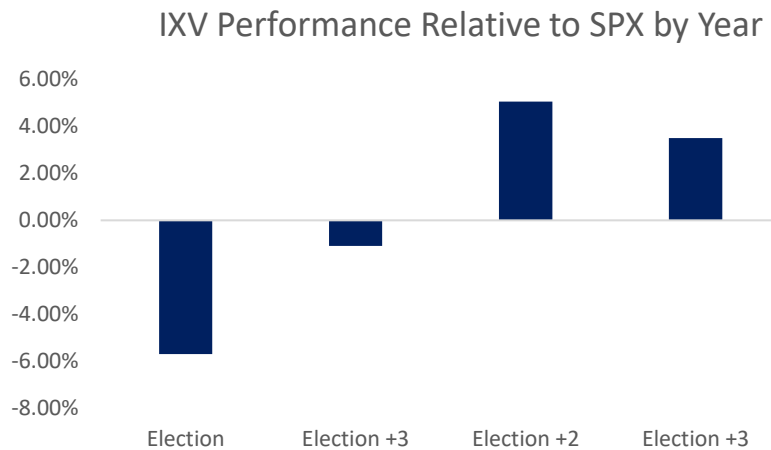
Looking at other variables effecting the return of healthcare stocks, they are largely negligible. The party of the current president had no tangible impact on the returns of the sector, only the fact as to whether there was an incumbent president or not. The same holds true for the composition of congress at the time and whether that composition was in line with the party of the president or not.

Analysis

Stocks generally underperform in election years relative to non-election years. There are clear discrepancies in the data in election years vs non-election years and those are even more exacerbated at the end of the first two years of a president's term where underperformance is more significant. Despite originally being based on data from the middle part of the century,

Allvine and O'Neal's study on the cyclical returns of markets throughout election cycles holds partially true in the modern era. From the data collected, the two worst years of performance occurred during election year +2, or the second year of a presidency, and during an election year, or the last year of a president's term. According to the previously stated data, this would in turn be a time for economic stimulus where the president has entered "campaign mode". The data in recent years, however, tells a vastly different story. I believe this is attributable to the massive increase in media coverage and availability of information in the modern era. Outperformance of stocks still exists in the third quarter of most presidencies, the best year on average, telling us the objective of presidents to promote economic expansion in the latter half of their terms continues to exist. However, with increased access to information regarding debates, policy platforms and election results, uncertainty regarding elections and their impact on businesses is in the forefront now more than ever. Wall Street dislikes uncertainty more than anything else, leading to a significant pickup in trading activity during primary and general election season and an overall weakness in stock market performance during that time.

Healthcare stocks underperform the broader market in election years as opposed to non-election years. This is brought on by the fact that healthcare expenditures are taking up a larger and larger percentage of the US Gross Domestic Product which forces policy to play a much larger role in regulating the sector. We can see this recently coming to fruition through presidential campaign platforms and policies including the Affordable Care Act in 2008 and a single payer health care system in 2016. These continue to have massive effects on the industry as a whole and uncertainty causes investors to take capital out of these stocks that are historically regarded as safe and defensive investments. Healthcare stock's performance

relative to the S&P, however, follows a different pattern than the general market. The underperformance is more significant in an election year and the year directly following. This follows more in line with the thought process that presidents are pursuing policy in the first few years of their presidency and economic gain in the latter half. Many political platforms have been focused around healthcare in recent races, therefore if Allvine and O'Neal's thought process holds true, the pursuance of a change in healthcare policy in the first half of a president's term can lead to increased uncertainty and volatility in healthcare stocks. Therefore, they follow a similar pattern to all stocks in the middle of the century. Back in the 1940's to 1970's, healthcare took up a much smaller chunk of the country's GDP (less than 5% according to statista.com) whereas in today's world it is nearly 20%. Therefore, political rhetoric is largely focused around changes to our healthcare system in the lead up to elections and healthcare is much more susceptible to policy changes in the first few years of a presidential term.

Within election years, the underperformance of healthcare stocks is not consistent throughout the year, as mentioned in the data, the first and fourth quarters heavily underperform where the second and third quarters outperform. This is largely due to the fact that the primary and general elections fall in the first and fourth quarters respectively of an election year. In these periods, as mentioned before, trading volume picks up significantly as a result of headline news coming out about the elections. This is even more exacerbated in elections where the playing field is more open and there is not an incumbent running. The breadth of potential policy implications becomes larger and investors get cold feet in owning businesses that are likely to get effected by the next policy decision. Healthcare is typically

dubbed the most susceptible by investors and the most likely to be negatively impacted by the election.

Concluding Thoughts

This study focused on stock returns in US markets with a focus on large-cap stocks. Despite there being evidence on similar return patterns in other countries, this study does not apply to those. In addition, this study only captures returns from 1998-2019, a span of only 5 election cycles, 2 being Democratic and 3 being Republican. In addition, the IXV is a market-cap weighted index of all businesses in the healthcare sector. Returns of individual subsectors are likely to differ significantly based off of their risk profiles and correlation to political developments. With that being said, the performance of the general market in recent years as well as the healthcare sector in recent years tells an interesting story. The Presidential Election Cycle has not fully held true throughout the twenty-first century, however it has in the healthcare sector specifically. The relationship between politics and market returns are pronounced and sustained over a long period of time. Based on continued underperformance in election years in both the SPX and healthcare sector, there appears to be a dislocation in value that investors are not taking into account in the healthcare sector and in the overall market.

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