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ScienceDirect
Mathematics and Computers in Simulation 79 (2009) 3267–3277
MATHEMATICS AND COMPUTERS IN SIMULATION
www.elsevier.com/locate/matcom

# Mapping the Presidential Election Cycle in US stock markets

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Received 3 February 2009; received in revised form 23 April 2009; accepted 6 May 2009
Available online 28 May 2009

**Abstract**

This paper shows that in the almost four decades from January 1965 through to December 2003, US stock prices closely followed the 4-year Presidential Election Cycle. 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 a Presidency, and reached a peak in the third or fourth year. This cyclical trend is found to hold for the greater part of the last ten administrations, starting from President Lyndon Johnson to the administration of President George W. Bush, particularly when the incumbent is a Republican. 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. There is irony in that bullish runs in the stock market have tended to coincide with sub-periods under Democratic administrations. The existence of the Presidential Election Cycle shown in the paper may constitute an anomaly in the US stock market, which could be useful for investors.


*Keywords:* Presidential Election Cycle; Spectral analysis; EGARCH Intervention model; Stock prices; Returns

## 1. Introduction

Prices are the outcomes of volatile human expectations, shifting the supply and demand lines, and causing prices to oscillate. Fluctuations in prices are a natural process of changing expectations, thereby leading to cyclical patterns. There are many kinds of cycles, with the combined effect of driving movements in stock prices.

Hurst [22] is a classic in the annals of cyclical analysis. Historically the stock market has had a role as one of the most sensitive indicators of the business cycle, and one of the most influential variables in the government's index of leading economic indicators [3,36,37,47]. Six interesting cyclical patterns are worthy of note: 28-day Trading Cycle (the Lunar Cycle), 10.5-month Futures Cycle, January Effect, 4-year Cycle (the Kitchin Cycle and the Presidential Election Cycle), 9.2-year Cycle (the Juglar Cycle), and 54-year Cycle (the Kondratieff Cycle).

The 28-day cycle, which is also known as the Lunar Cycle, was found as early as the 1930s in the wheat market. Regardless of the actual causes, many markets, including stocks, appear to follow the 28-day cycle. Although individual commodities exhibit their own unique cycles, another cycle ranging between 9 and 12 months has been found in the Commodity Research Bureau Index, which is a good reflection of the overall behaviour of commodity prices. In

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0378-4754/$36.00 © 2009 IMACS. Published by Elsevier B.V. All rights reserved.
doi:10.1016/j.matcom.2009.05.007

addition, the stock market has shown an uncanny tendency to end the year higher (lower) if prices increase (decline) during the month of January, leading to the saying: "so goes January, so goes the rest of the year." Between 1950 and 1993, the January Effect was correct on 38 of 44 occasions, with an accuracy rate of 86%.

Financial astrology is one of the explanations for the cycle analysis, but they are not based on the study of market prices in the derivation of the cycles' numbers. W.D. Gann, a well-known trader in the 1950s, is one of the pioneers in adopting financial astrology, namely the Jupiter–Saturn cycle, to facilitate trading activities. Since Jupiter and Saturn are the largest planets in our solar system, their gravitational pull when they are in line is believed to be one of the strongest. The effect of this gravitational pull is so strong that it causes the sun to shift periodically, based on their positions around the true center of the mass of the solar system. Such shifts will cause the weather to change substantially, which will eventually affect commodity prices. As commodity, bond and stock markets overlap closely, such linkages will spread with spillover effects into bond and stock markets.

In 1860, Clemant Juglar found that a cycle lasting approximately 9 years existed in many areas of economic activity, including the stock market. Subsequent research found that this cycle had a significant presence during the period 1840–1940. Named after a Russian economist, Nicolai Kondratieff, the Kondratieff Wave is a long-term, 54-year cycle that has been identified in prices and economic activity. However, since this cycle is extremely long, to date it has only repeated itself three times in the stock market.

The most popular cycle is the 4-year cycle, which is also known as the Kitchin Wave and the Presidential Election Cycle. The theory that seeks to explain the relationship between stock prices and Presidential elections is called the Theory of the Presidential Election Cycle. Every 4 years, American voters elect a President. Due to the President's overwhelming influence on both domestic and world affairs, the ripple effects of Presidential elections are staggering. Hence, it should not come as a surprise that stock prices, often called a leading indicator of the macroeconomy, are affected by Presidential elections. It is well known that business prospers in an environment of low taxes and stable government policies, which is precisely what policy-makers serve up in an election year when no public official wants to be seen as a big tax-and-spend proponent. Therefore, the stock market tends to prosper in an election year.

Kitchin [28] found that a 40-month cycle existed in a variety of financial variables in both Great Britain and the USA between 1890 and 1922. The 4-year Presidential cycle was later found to have an extremely strong presence in the stock market between 1868 and 1945. Stovall [50] found a pattern of low returns in the first 2 years of a President's term and high returns in the last 2 years in the stock market. Although it is called a "4-year cycle", the length of the cycle has been found to vary between 40 and 53 months.

This paper explores the existence of the Presidential Election Cycle in the USA based on Presidential elections that occur every 4 years. One possible underlying reason is that stock prices may decline following a Presidential election as the newly elected President takes unpopular steps to make adjustments to the economy. In mid-term, stock prices may begin to rise in anticipation of a stronger Election Day economy.

Schwert [46] and Fama [8] have confirmed that stock prices are correlated with future economic activity in statistical regressions. Confidence in the President may implicitly reflect the underlying economic conditions, which are important in determining stock prices. Recently, Decker and Wohar [7] found that the probability of the incumbent party losing a state previously carried increases with petroleum product prices, but only in those states that have primarily energy consuming economies. They also found that increases in the number of international conflicts, increases in real state per-capita income growth, and increases in state per-capita grants-in-aid all reduce the likelihood of losing previously carried states, while higher taxation growth increases this likelihood.

The pattern in stock market prices related to the 4-year Presidential term has been the focus of Wall Street pundits for some time. Allivine and O'Neill [2], Gartner and Wellershoff [13], Hensel and Ziemba [20], Huang [21], and Booth and Booth [5] found that the difference between the returns in the first half and those in the second half of the Presidential term are economically and statistically significant. In addition, Huang [21] reported that such a Presidential cycle has persisted in both Democratic and Republican administrations, but is more pronounced in Democratic administrations. Examining each year's returns in the Presidential term, Foerster and Schmitz [10] found that both US and international stock returns were lower in the second year of the US Presidential term relative to those in years 1, 3, and 4. Finance academic researchers have tended to focus their attention on how monetary policies and business conditions might explain stock market movements as the reason for a Presidential Election Cycle in the stock market.