Polls, Politics, and Profits: The 2024 US Presidential Election's Economic Ripples

Abstract

Purpose This study examines how opinion polls influence stock market behavior during the 2024 U.S. Presidential Elections, focusing on the S&P 500 and NASDAQ indices.

Design/methodology/approach A regression-based approach using an Autoregressive Distributed Lag (ARDL) model analyzes polling data from Real Clear Politics and Morning Consult, alongside stock indices, volatility (VIX), and Treasury yields. Data spans July 1 to November 8, 2024, with correlation analysis and forecasting applied.

Findings Results show that market movements are more influenced by historical trends and volatility rather than polling data. The ARDL model finds no statistically significant effect of polls on stock prices. Market volatility and past trends play a stronger role in stock performance, leading to the rejection of both hypotheses (H_1 & H_2) regarding election influence on market dynamics.

Originality Unlike prior studies focused on singular election cycles, this research integrates multiple polling sources with an advanced econometric approach to provide comprehensive insights.

Research limitations/implications External economic variables and geopolitical risks may also impact stock fluctuations, suggesting future studies should include broader macroeconomic factors.

Practical implications Investors should prioritize economic indicators and volatility indices over polling data for market predictions.

Social implications Findings highlight the need for policy transparency to maintain investor confidence amid political uncertainty.

Keywords: U.S. Elections, Opinion Polls, Stock Market, Market Volatility, S&P 500, NASDAQ, Political Uncertainty

Article Classification: Research Paper

Introduction

Opinion polls conducted during presidential elections reflect the preferences of voters for candidates. Such preferences are formed by a combination of candidates proposed economic, domestic, and foreign policies, along with their personal traits and public perception. Therefore, voter responses in opinion polls can be interpreted as expressions of support for the policy platforms of specific candidates.

It is well accepted in U.S. political discourse that voters often make their decisions based on economic considerations. This concept, often referred to as "voting with their pocketbooks," suggests that people are swayed by their perceptions of the current economic conditions or how they believe a candidate's policies might affect their financial stability in the future. In the general sense of things, a left- earning candidate will campaign to raise taxes, increase regulatory aspects of businesses, and add new social welfare. While the intended result is more equal income, critics feel this approach hinders economic growth.

Conversely, right-leaning candidates, especially Republicans, typically prefer low taxes, reduced regulation, and welfare reform. Such policies resonate with free-market principles and are believed to be pro-business growth. Thus, stock markets are considered to react favorably to Republican policies since these are believed to be associated with increased corporate earnings and decreased operational constraints.

It may be assumed on these premises that stock markets tend to respond favorably when an opinion poll leads a Republican candidate to surge and negatively when it propels a Democratic candidate up.

Upadhyaya et al. (2024) tested this hypothesis during 2016 U.S presidential polls and suggested that election polls did not have any significant effect on the stock returns. Contrary to that, previous studies, such as Ejara et al. (2012), tested this hypothesis during the 2008 U.S. presidential election. Their results showed that the stock market responded negatively when the Democratic nominee Barack Obama gained momentum in polls, while the stock market reacted positively to the Republican nominee, John McCain.

Assuming these assumptions, it can be inferred that stock markets tend to react positively when an opinion poll propels a Republican candidate up and negatively when it propels the Democratic candidate up.

- Five Thirty-Eight: Not exclusively known for aggregating the polling averages, Five Thirty Eight gives weight to the recent of polls, sample size, methodology, and potential biases into its aggregation.
- Real Clear Politics (RCP): RCP pools together data from several polling outlets to provide a snapshot of where public opinion might be headed entering the election.
- Forbes/Harris X: surveyed between July 22 and 25, 2024, among 3,013 registered voters in a sampling with a margin of error of ±1.8%.
- New York Times/Siena College: This opinion poll was from July 22 through 24, 2024. 1,141 likely voters had their opinions measured; the survey carried a ±3.3% margin of error.
- CNBC: Had surveyed 2,137 registered voters from July 22 through 24, 2024, with the study carrying a margin of ±1.0% error rate.

Building on these results, this study explores the influence of opinion polls on stock market behavior concerning the 2024 presidential elections. Unlike most previous works, which were primarily based on Gallup Poll (Ejara et al., 2012), Real Clear Politics (RCP) (Upadhyaya et al., 2024), in this analysis, averages of polls from Morning Consult pollster

(https://www.realclearpolling.com/polls/president/general/2024/trump-vs-biden) that evaluates the effect of these opinion polls on two key market indices: NASDAQ, S&P 500.

A pretty interesting dynamics around the 2024 election-what's actually interesting in case studies-is there are strong people with some fairly strong populist credentials. In addition, a presidential re-election: Former President Donald Trump for president and re-election will bring very polarizing as he represents base of the great populist movement support, on Democratic side is also presidential Joe Biden for second terms: trying unification for one more period under his lead of the progressive political push. The contrasts between these candidates, in policy approach and personal branding, offer an opportunity to explore how the stock market interprets changes in electoral momentum.

This study attempts to contribute to this broader understanding, analyzing market reactions to fluctuations in poll standings on how political developments influence economic indicators, especially amidst a contentious election cycle.

Literature Review

The government transitions are sensitive to economic and political events as changes in the regulatory and macroeconomic policies during the transition process tend to influence business profitability, shareholder dividends, and consequently stock prices. Changes in U.S. stocks tend to spill over into foreign stock markets, an indication of how the global financial systems are intertwined (Zhang & Broadstock., 2020). Given that election polls do indicate the potential likelihood of particular candidates or parties to form a government, these should also be influential on the stock market behavior.

Extensive research has been conducted on the relationship between election polls and stock markets across different countries. Chan and Wei (1996) looked into how political events in Hong Kong affected its stock market. They found that political news had a significant effect on the Hang Seng Index but had no measurable effect on the China-related Red-Chip Index. Kim & Mei (1994) discovered that political news had a significant impact on the Hang Seng Index, and China's political events also had a measurable influence as well. Similar results have been

observed by Ho & Nijman (2017), which analysed the influence of the stock market performance and economic performance in Hong Kong and found that the relationship between the stock market performance and the economic performance in Hong Kong is heavily influenced by the specific proxy selected to represent stock market performance. Opinion polls and UK stock were analyzed by Ioannidis and Thompson in 1986.

Prices from 1960 to 1979, finding a link between the Conservative Forsythe vote strength and the market returning a positive realistically insignificantly. Another study by Forsythe et al., (1995) and Thompson (1993) that analyzed the 1988 Canadian general election repo Ange's Positive correlation between the Conservative Party and the Toronto Stock Exchange's performance.

Kumar Deva et al. (2015) analyzed the influence of the 2014 Lok Sabha elections on stock markets through Twitter data, using public sentiment analysis and endogenous as well as exogenous factors to reveal positive responses of the market and abnormal returns, highlighting the relationship between political events and economic fluctuations. Similarly, Alam et al. (2020) studied the effect of the COVID-19 lockdown on the Indian stock market using the Market Model Event study methodology. It analyzed 31 randomly selected companies from the Bombay Stock Exchange over a 35-day period, and the results show a positive market reaction during the lockdown period, which contrasts with negative investor sentiment in the pre-lockdown phase.

Cunha (2024) studies the response of financial markets to elections in developing countries, and finds that domestic financial markets react more strongly and quickly than international markets because of higher exposure to political risks and an information advantage among local investors. The study demonstrated, using country fund pricing data from 1988 to 2015, that domestic market reactions often lead and influence international markets, driving home the important role of domestic investors in shaping state-market dynamics in a partially globalized world. An Australian study by Bilson et al, (2024) analyzing the linkage between social media engagement and election success found out that a candidate's district share of Facebook likes increases by a 1 percent increase in predictive rise of their vote share for 0.09 percent. Their findings showed that Facebook likes can predict election outcomes reliably in almost two-thirds of cases, surpassing traditional predictors such as the attractiveness and competence ratings of candidates, indicating that social media engagement is a good predictor of campaign success.

Studies have also been conducted in the U.S. for similar dynamics. Mattozzi (2008) employed the low Political Stock Market as a proxy for determining the likelihood of George W. Bush winning the 2000 election. The study established "Bush" and "Gore" portfolios based on the firms that favored each candidate and found a positive correlation between the political performance of Bush and his portfolio returns and an inverse relationship for Gore's portfolio.

Ejara et al. (2012) examined the response of the stock market during the 2008 U.S. presidential election, indicating that polls could be intermediate factors between the likely winning political platform and the market reaction. As the policies of Democrats and Republicans differ noticeably, the authors found a negative reaction to Barack Obama's leading polls over John McCain as a reflection of the divergence in the preference of Wall Street from the mass of electorates.

Duquette et al. (2014) investigate the causal link between polling data from Real Clear Politics (RCP) and In Trade (IT) prediction markets. The authors found that RCP poll averages Granger-caused IT share prices, but prediction markets provided little extra predictive power over aggregated polling data.

Research questions derived from the literature are as follows:

1. How does the 2024 Presidential Elections in U.S. influence the performance and trends in stock markets?
2. What are the implications of 2024 US Presidential elections on the risk-return dynamics of U.S. firms?
3. Is there a significant relationship between the victory of a particular political party and the risk & return behavior of U.S. firms?

Hypothesis Development

Drawing upon insights gained from the theoretical framework and a comprehensive review of scientific literature, the following hypotheses have been formulated for further analysis:

- **H_1:** Presidential Elections significantly influence the risk-return dynamics of the S &P 500 Index.
- **H_2:** Presidential Elections significantly influence the risk-return dynamics of the NASDAQ Index.

Methodology and Data

Following the frameworks established by Brander & Spencer (1989), Jensen and Schmith (2005), Mattozzi (2008), and Ejara et al. (2012), this study adopts a regression-based methodology to examine the relationship between stock market behavior and key influencing factors. The foundational assumption is that if markets are efficient, asset prices should fluctuate randomly, with all available information already reflected in current prices. This concept is represented in the following equation:

$$\boldsymbol{AP_t = C_0 + C_1 AP_{t-1} + e_t}$$

Where, AP_t denotes the daily stock price, e_t represents the random error term, and t refers to the time period.

Beyond random fluctuations, AP (assets prices) is also influenced by macroeconomic variables such as interest rates. For instance, a rise in interest rates often leads investors to shift assets from stocks to bonds due to higher returns and lower risks, whereas a drop in interest rates may incentivize a shift back to stocks for potentially higher returns. Additionally, uncertainty caused by various incidents in the stock market, captured by the Chicago Board of Volatility Index (VIX), plays a critical role in shaping asset prices.

Given the study's objective of analyzing the impact of news polls related to elections on the stock market behavior, interest rates, Volatility Index (VIX), and polling data were incorporated into the model. When these variables were added and the dependent variable was redefined as stock returns, the empirical model becomes:

$$\Delta SP500_t \; or \; NASDAQ_t = \beta_0 + \sum_{i=1}^{p} \alpha_i \Delta SP500_{t-i} + \sum_{j=0}^{q} AP_{t-j} + \sum_{k=0}^{s} \delta_k \, INT_{t-k} + \sum_{m=0}^{s} \theta_m POLL_{t-m} + \sum_{n=0}^{v} \emptyset_n VIX_{t-n} + \varepsilon_t$$

Here:

- $\Delta SP500_t$ or $\Delta NASDAQ_t$: Daily stock return
- AP: Asset price (stock indices)
- INT: interest rates
- POLL: polling variable
- VIX: market volatility (uncertainty index)
- p, q, r, s, v are the lag orders, which can be selected using AIC (Akaike Information Criterion).
- ε_t is the error term.

After conducting essential tests such as unit root, heteroskedasticity, correlation analysis, the ARDL model is applied. The polling variable (POLL) is defined as the Republican candidate's (Donald Trump's) advantage over the Democratic candidate (Hillary Clinton), calculated as Trump's favorable rating minus Clinton's favorable rating. Since poll results are typically released in the evening, a one-period lag was introduced to capture the stock market's reaction to these announcements.

Data

The study utilizes daily data from July 1, 2024, to November 8, 2024, covering the U.S. presidential election period. Data sources include:

- **Stock indices:** Yahoo Finance
- **Polling data:** Morning Consult Pollster from Real Clear Politics (RCP) average polls, expressed as percentages
- **VIX index:** Yahoo Finance
- **Interest rates:** 10-year Treasury yield from the St. Louis Federal Reserve, expressed as percentages

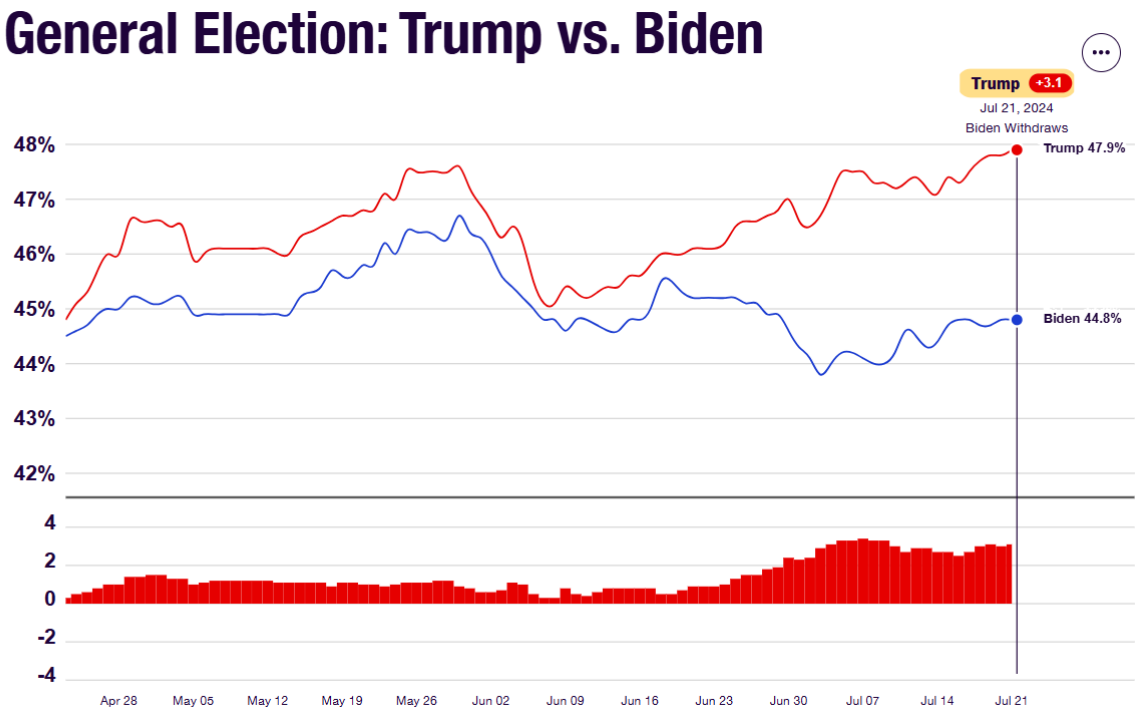
This comprehensive dataset enables the analysis of interactions between election polls, market volatility, interest rates, and stock returns.

Empirical Results

Descriptive Analysis

Polling for the 2024 presidential election was held on 5 Nov, 2024. If we see the prediction based on real clear polling data, Trump's favorable rating exceeded over the Biden rating for most of the period. Fig. I present a polling trend for the 2024 U.S. Presidential Election, comparing support levels for Donald Trump and Joe Biden over time. The red line in the graph shows Trump's polling percentage, while the blue line shows Biden's. Trump's support shows an increasing trend, peaking at 47.9% by July 21, 2024. However, Biden's support fluctuates but declines significantly after early June, settling at 44.8%.A notable event on July 21, 2024, marks "Biden Withdraws," which might have influenced the polling trends. The bar graph at the bottom illustrates the difference in polling support between the candidates, showing Trump gaining a consistent lead over time. As of July 21, Trump leads by 3.1 percentage points.

Fig. I: Candidates' polls prediction results



Source: https://www.realclearpolling.com/polls/president/general/2024/trump-vs-biden

Table I. Descriptive Statistics

Variable	Mean	Median	Maximum	Minimum	SD	Skewness	Kurtosis	Jarque-Bera	Prob.
Polling (POLL)	1.32	1	2	0	0.76	-0.6	1.97	9.86	0.0072
S&P Price	5747.93	5751.07	6090.27	5186.33	220.54	-0.43	2.66	3.44	0.18
VIX (S&P 500)	19.52	19.19	33.71	16.24	2.71	1.97	9.96	253.17	0
NASDAQ Price	19,350.39	19,456.27	20,220.36	17,725.18	563.57	-0.75	3.34	9.34	0.0094
VIX (NASDAQ)	21.35	21.35	35.1	15.15	3.44	0.67	4.67	18.16	0.0001
10-Year Treasury Yield	4.05%	4.03%	4.57%	3.63%	0.26%	0.1	1.62	7.66	0.0217

Source: Calculated by Authors using E-Views

Table I. represents the data results for the poll differences, stock market index based on daily returns, volatility index (VIX) returns or 10-years Treasury Interest Rates. For the purpose of stock market indexes data, S&P 500 and NASDAQ are used. As there is one-day lag period, so stock and VIX returns are calculated as log differences between days. Day-wise data is used for all returns and treasury interest rates.

Also, this figure shows results for the entire polling period, i.e., July 1, 2024 to November 8, 2024. It shows that there is a 1.32 average polling difference between Trump & Joe Biden, means that there is a significant advantage of Trump over Joe Biden. This advantage pattern can

be clearly observed before and after the polling period, but there is broader gap in the earlier segment than the later one.

Table II: Correlation analysis among variables

	S_P500CLOSEPRICE	S_P500ASSETPRICE	VIXS_P500	S_P500DATE	POLL	_10YEAR_TREASURYRATESPER	NASDAQAP	NASDAQPRICE	VIXNASDAQ
S_P500CLOSEPRICE	1.000	0.077	-0.680	0.924	-0.532	0.710	-0.006	0.930	-0.767
S_P500ASSETPRICE	0.077	1.000	-0.261	-0.054	0.098	-0.013	0.701	0.114	-0.196
VIXS_P500	-0.680	-0.261	1.000	-0.447	0.265	-0.268	0.067	-0.697	0.943
S_P500DATE	0.924	-0.054	-0.447	1.000	-0.557	0.819	0.005	0.791	-0.573
POLL	-0.532	0.098	0.265	-0.557	1.000	-0.439	0.060	-0.494	0.339
TREASURYRATE	0.710	-0.013	-0.268	0.819	-0.439	1.000	0.048	0.533	-0.315
NASDAQAP	-0.006	0.701	0.067	0.005	0.060	0.048	1.000	-0.018	0.070

NASDAQPRICE	0.930	0.114	-0.697	0.791	-0.494	0.533	-0.018	1.000	-0.758
VIXNASDAQ	-0.767	-0.196	0.943	-0.573	0.339	-0.315	0.070	-0.758	1.000

Source: Calculated by Authors using E-Views

The table II presents the correlation coefficients among various financial market indicators. Key observations include strong positive correlations between S&P 500 close price and both S&P 500 date (0.92) and NASDAQ price (0.93), indicating that as the S&P 500 grows over time, NASDAQ prices tend to rise as well. Conversely, the S&P 500 close price has a strong negative correlation with VIX S&P 500 (-0.68) and VIX NASDAQ (-0.77), reflecting the inverse relationship between market indices and volatility measures. Similarly, NASDAQ price also has a strong negative correlation with both volatility indices, VIX S&P 500 (-0.70) and VIX NASDAQ (-0.76). Interestingly, S&P 500 asset price changes correlate positively with NASDAQ asset price changes (0.70), suggesting aligned short-term market movements. On the other hand, poll exhibits weaker correlations with most indicators, with the strongest positive relationship to VIX S&P 500 (0.26) and a moderate negative relationship with NASDAQ price (-0.49). Additionally, 10-year Treasury rates show moderate positive correlations with S&P 500 close price (0.71) and NASDAQ price (0.53), suggesting some association between rising long-term rates and equity performance. These relationships provide insights into how these variables interact in market dynamics, highlighting the interdependence of equity indices, volatility, and interest rates.

Table III: ARDL Model

Dependent Variable: S_P500CLOSEPRICE
Observations Included for Interpretation: 88 after adjustments
Maximum lags of Maximum nature: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)

Dynamic regressors (4 lags, automatic): _10YEAR_TREASURYRATESP				
ER POLL SPASSETPRICE VIXS_P500				
Fixed regressors: C				
Number of models evalulated: 2500				
Selected Model: ARDL(3, 0, 0, 0, 3)				
Note: Final equation sample is larger than selection sample				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
S_P500CLOSEPRICE(-1)	1.015573	0.005227	194.3069	0.0000
S_P500CLOSEPRICE(-2)	-0.004908	0.006216	-0.789625	0.4322
S_P500CLOSEPRICE(-3)	-0.008028	0.005425	-1.479956	0.1430
_10YEAR_TREASURYRATES PER	-0.381356	1.104330	-0.345328	0.7308
POLL	0.135513	0.273161	0.496094	0.6212
SPASSETPRICE	13410.68	65.44965	204.9007	0.0000
VIXS_P500	0.851046	0.196732	4.325910	0.0000
VIXS_P500(-1)	-0.626544	0.176775	-3.544309	0.0007
VIXS_P500(-2)	0.593190	0.180214	3.291592	0.0015
VIXS_P500(-3)	-0.772392	0.165383	-4.670314	0.0000
C	-15.11469	11.27777	-1.340220	0.1841
R-squared	0.999948	Mean dependent var		5747.066
Adjusted R-squared	0.999941	S.D. dependent var		208.8433
S.E. of regression	1.604414	Akaike info criterion		3.899862
Sum squared resid	198.2090	Schwarz criterion		4.209529
Log likelihood	-160.5939	Hannan-Quinn criter.		4.024619
F-statistic	147402.5	Durbin-Watson stat		1.912883
Prob(F-statistic)	0.000000			
*Note: p-values and any subsequent tests do not account for model selection.				

Source: Calculated by Authors using E-Views

Table III represents the analysis. The ARDL (Autoregressive Distributed Lag) model estimates the relationship between the stock indexes, i.e., S&P 500 closing price and various independent variables, including 10-year Treasury rates, political factors (POLL), asset prices (SPASSETPRICE), and the VIX volatility index (VIXS_P500). The model selection is based on the Akaike Information Criterion (AIC), leading to the ARDL(3,0,0,0,3) specification. The results show that past values of S&P 500 closing prices significantly impact its current price, with S_P500CLOSEPRICE(-1) having a strong positive effect. The asset price variable (SPASSETPRICE) also plays a major role, with a large and highly significant coefficient. The volatility index (VIXS_P500) influences the market both directly and through lagged values, showing alternating positive and negative effects. However, variables like 10-year Treasury rates and POLL do not show significant effects on S&P 500 prices in this model. The R-squared value (0.999948) suggests an extremely high explanatory power, though this could indicate over fitting. Additionally, the Durbin-Watson statistic (1.912883) suggests no major autocorrelation issues. These findings highlight the importance of historical prices and market volatility in predicting S&P 500 movements.

The ARDL results suggest that there is a statistically significant effect of election outcomes either Republican or Democratic on the risk return dynamics of the U.S. stock market. Hence H_1 is rejected. Instead, market volatility (VIXS_P500) is a stronger predictor of stock market fluctuations. This indicates that investor sentiment, global economic conditions, and market uncertainty have a greater impact than election results alone.

(i) NASDAQ

Table IV: ARDL Model

Dependent Variable: NASDAQPRICE		
Included observations: 78 after adjustments		
Maximum dependent lags: 4 (Automatic selection)		
Model selection method: Akaike info criterion (AIC)		
Dynamic regressors (4 lags, automatic): NASDAQAP POLL		
_10YEAR_TREASURYRATESPER VIXNASDAQ		
Fixed regressors: C		

Number of models evalulated: 2500				
Selected Model: ARDL(4, 2, 0, 4, 0)				
Variable	Coefficient	Std. Error	t-test	Prob.*
NASDAQPRICE(-1)	1.319383	0.118544	11.12989	0.0000
NASDAQPRICE(-2)	-0.354273	0.196626	-1.801766	0.0764
NASDAQPRICE(-3)	0.450022	0.196807	2.286614	0.0256
NASDAQPRICE(-4)	-0.467326	0.110077	-4.245458	0.0001
NASDAQAP	28378.91	2042.570	13.89373	0.0000
NASDAQAP(-1)	13239.44	3947.772	3.353650	0.0014
NASDAQAP(-2)	13958.81	3808.746	3.664937	0.0005
POLL	-14.09692	11.99516	-1.175218	0.2443
_10YEAR_TREASURYRATESPER	-31.80800	153.1507	-0.207691	0.8361
_10YEAR_TREASURYRATESPER(-1)	346.7543	208.0006	1.667083	0.1005
_10YEAR_TREASURYRATESPER(-2)	-453.7071	214.2094	-2.118054	0.0381
_10YEAR_TREASURYRATESPER(-3)	-43.75413	236.8138	-0.184762	0.8540
_10YEAR_TREASURYRATESPER(-4)	214.0815	169.4645	1.263282	0.2111
VIXNASDAQ	-2.380773	4.098092	-0.580947	0.5633
C	949.5108	558.8161	1.699147	0.0942
R-squared	0.986343	Mean dependent var		19310.29
Adjusted R-squared	0.983308	S.D. dependent var		497.8430
S.E. of regression	64.31947	Akaike info criterion		11.33664
Sum squared resid	260630.6	Schwarz criterion		11.78986
Log likelihood	-427.1291	Hannan-Quinn criter.		11.51807

F-statistic	325.0055	Durbin-Watson stat		2.146230
Prob(F-statistic)	0.000000			
*Note: p-values and any subsequent tests do not account for model selection.				

Source: Calculated by Authors using E-Views

Table IV explains the ARDL model. It has been applied to analyze the factors influencing **NASDAQPRICE** over time. The dataset consists of **78 observations**, covering the period from **August 7, 2024, to December 19, 2024**. To determine the best-fit model, **2500 different models were evaluated** using the **Akaike Information Criterion (AIC)**, with **ARDL (4,2,0,4,0)** being selected as the optimal model. This selection ensures that the most relevant lag structures of the dependent and independent variables are considered for accurate predictions.

Impact of Past NASDAQ Prices

The findings indicate that **past values of NASDAQPRICE significantly influence its current price**. The **first lag (NASDAQ PRICE(-1))** has the highest impact, with a **coefficient of 1.3193** and a **p-value of 0.0000**, showing a significant positive relationship. This implies that if NASDAQ prices increased in the previous period, they are likely to continue rising. However, **NASDAQPRICE(-2) has a negative effect**, while **NASDAQPRICE(-3) and NASDAQPRICE(-4) show mixed influences**, indicating that short-term fluctuations play a role, but the market tends to correct itself over time.

Significance of NASDAQ Application Performance (NASDAQAP)

Another crucial factor affecting NASDAQPRICE is **NASDAQAP (NASDAQ Application Performance)**. The current value of NASDAQAP has an exceptionally high **coefficient of 28,378.91** and a **p-value of 0.0000**, confirming its strong impact. Additionally, **lagged values (NASDAQAP(-1) and NASDAQAP(-2))** also exhibit significant positive effects, emphasizing that past NASDAQ performance continues to drive price movements. This finding suggests that investors consider past NASDAQ trends as a strong indicator of future performance.

Limited Influence of Political Factors (POLL)

The analysis also examines the impact of political sentiment on NASDAQ prices through the **POLL variable**. The results show a **negative coefficient of -14.09**, but with a **p-value of 0.2443**, indicating that the effect is not statistically significant. This suggests that while political events and public sentiment may influence short-term fluctuations, they do not play a major role in determining long-term NASDAQ trends within this model.

Mixed Effects of 10-Year Treasury Rates

The relationship between **NASDAQPRICE and 10-Year Treasury Rates** appears complex. While the **current rate** and most lagged values do not significantly impact NASDAQ prices, **10YEAR Treasury Rates PER(-2) has a coefficient of -453.70** and a **p-value of 0.0381**, indicating a strong negative impact. This suggests that **interest rate movements from two periods ago negatively influence NASDAQ prices**, as investors react to past interest rate changes rather than immediate shifts. This delay in response is likely due to the time it takes for interest rate policies to affect investment decisions.

Minimal Impact of Market Volatility (VIXNASDAQ)

The model also considers the role of market volatility through **VIXNASDAQ**, but its **coefficient (-2.38) and p-value (0.5633)** suggest that it does not significantly impact NASDAQ prices. This finding indicates that, within this model, **NASDAQ prices are not highly sensitive to short-term volatility**, possibly because investors focus more on fundamental market trends rather than temporary fluctuations.

Overall Model Strength and Reliability

The **R-squared value of 0.9863** indicates that the model explains **98.6% of the variation in NASDAQPRICE**, making it highly reliable. Additionally, the **Durbin-Watson statistic (2.1462)** suggests that the model does not limit itself from significant autocorrelation issues, ensuring stable residuals. The **F-statistic (325.0055) with a p-value of 0.000000** confirms that

the model is highly significant, meaning that the selected variables collectively have a strong influence on NASDAQ prices.

The ARDL results suggest that election outcomes has not statistically significant impact on NASDAQ Price, as its coefficient is negative (-14.09692) but not statistically significant (p = 0.2443). Hence, H_2 is rejected. Similarly, the 10-year Treasury rate does not consistently influence NASDAQPRICE, with mixed significance across lags.

Table V: Chow Forecast Test for S & P

Test predictions for observations from 11/05/2024 to 12/19/2024				
	Value	df	Probability	
F-statistic	0.729830	(31, 59)	0.8284	
Likelihood ratio	30.83650	31	0.4745	
F-test summary:				
	Sum of Sq.	df	Mean Squares	
Test SSR	265704.1	31	8571.100	
Restricted SSR	958598.5	90	10651.09	
Unrestricted SSR	692894.4	59	11743.97	
LR test summary:				
	Value	df		
Restricted LogL	-572.7183	90		
Unrestricted LogL	-557.3001	59		
Unrestricted log likelihood adjusts test equation results to account for				
observations in forecast sample				

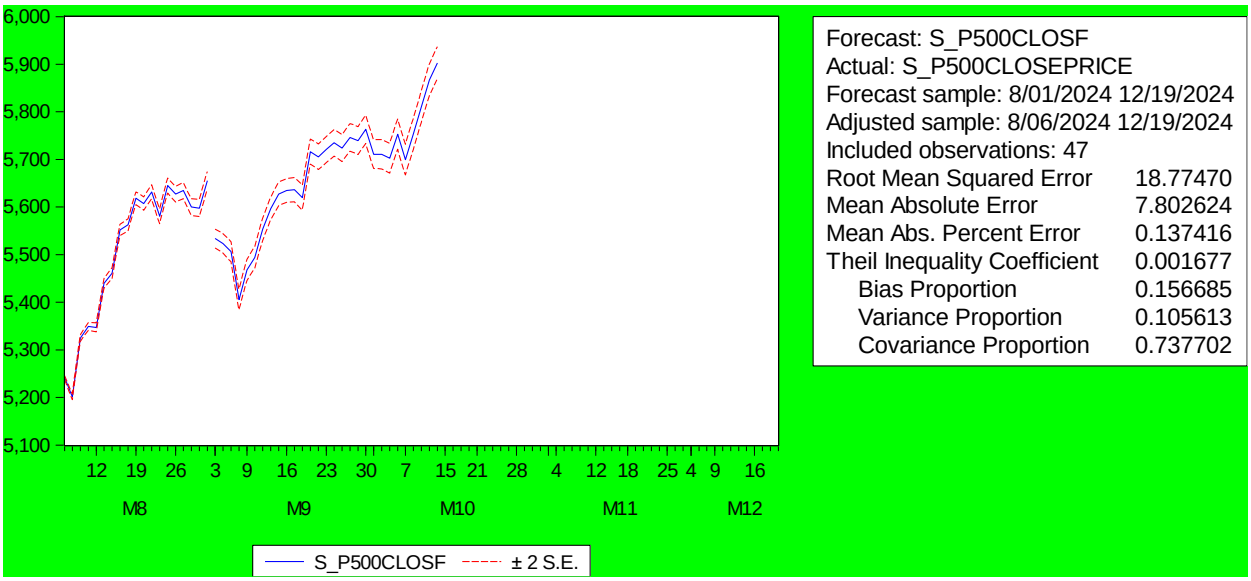
Source: Calculated by Authors using E-Views

The Chow forecast test was used to evaluate the stability of a model predicting S&P 500 close prices across a specific forecast period (November 5, 2024, to December 19, 2024) in Table V. The results show no significant changes in the model's parameters, as indicated by the F-statistic

(0.7298) and likelihood ratio (30.8365), both suggesting stability. The sum of squared residuals (SSR) comparison between restricted and unrestricted models does not show large differences, further supporting the consistency of the model. Additionally, the log-likelihood values indicate only a small improvement when moving to the unrestricted model, implying that the simpler, restricted model is sufficient. Overall, the test confirms that the relationships between the variables (10-year Treasury rates, POLL, SPASSETPRICE, and VIX) and the S&P 500 remain stable, making the model reliable for forecasting during the specified period.

Stock market movements, including NASDAQ prices, can be influenced by investor sentiment, economic data, and external factors like political elections. One of the key drivers of stock market fluctuations during an election cycle is polling data. As new poll results emerge, market participants adjust their expectations about future policies, regulations, and economic conditions, leading to price fluctuations.

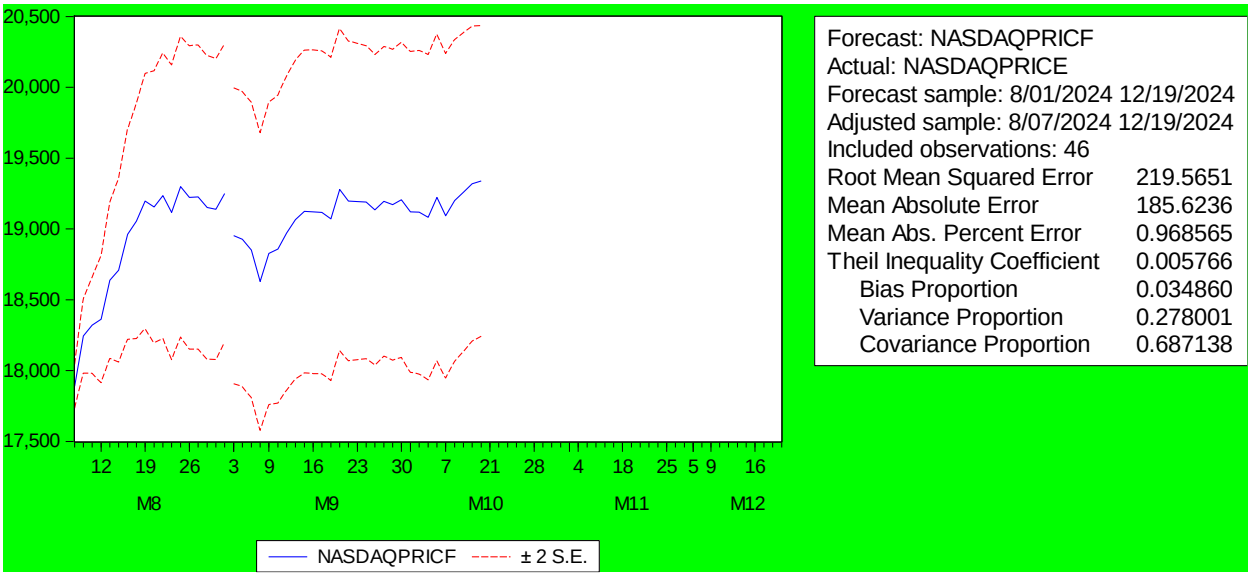
Fig. II: Forecast results for S & P 500



Source: Calculated by Authors using E-Views

The forecast evaluation for **S&P 500 close prices** can be analyzed in the context of poll results (Fig. II), as financial markets often react to political and economic uncertainties reflected in polling data. The model provides **high forecast accuracy**, with a **Mean Absolute Percentage Error (MAPE) of just 0.317%**, indicating that it effectively captures market trends. However, the **covariance proportion of 73.77%** suggests that most errors stem from **random fluctuations**, which can be linked to unpredictable market reactions to poll outcomes. As elections approach, investor sentiment shifts based on changing political prospects, causing stock prices to fluctuate. For example, if a leading candidate advocating market-friendly policies gains momentum in the polls, stock prices may rise, while uncertainty over a potential policy shift could lead to increased volatility. The model's **low bias proportion (15.67%)** shows that systematic errors are minimal, meaning it does not consistently overestimate or underestimate price movements. Additionally, the **variance proportion (10.56%)** indicates that the model effectively adapts to market shifts but may not fully capture abrupt reactions to surprise poll results. The **±2 standard error bands** highlight the confidence interval, within which most predictions remain accurate, despite short-term volatility. Overall, while the model is highly effective in forecasting long-term trends, incorporating **real-time polling data and economic indicators** could further enhance short-term predictive accuracy, especially during election periods when market sentiment is highly reactive.

Fig. III: Forecast results for NASDAQ



Source: Calculated by Authors using E-Views

Fig.III has shown the below forecast results for NASDAQ:

1. **Random Fluctuations (Covariance Proportion: 68.71%)**
    - The high covariance proportion in the forecast errors (68.71%) suggests that a large part of the deviation from actual prices is due to unpredictable factors.
    - In the real world, stock prices often react sharply to unexpected polling results, causing volatility. For example, if a leading candidate suddenly loses ground in the polls, investors may fear policy uncertainty, resulting in sudden price swings that the model might struggle to capture.
2. **Systematic Bias (Bias Proportion: 3.48%)**
    - A low bias proportion means that the forecast does not consistently overestimate or underestimate the NASDAQ price.
    - This aligns with how markets react to polling trends. If polls consistently favor one candidate, the market adjusts gradually. However, since bias is low, it suggests that the model doesn't have a strong directional error and is relatively neutral in its predictions.
3. **Variance Proportion (27.08%)**
    - This represents the portion of forecast errors caused by the model not fully capturing shifts in market volatility.
    - During election periods, polls create market uncertainty. As Election Day nears, volatility increases as investors digest the latest polling results and their implications. If the variance proportion were higher, it would indicate that the model is struggling to adjust to changes in volatility caused by new polling data.

Market Behavior and Model Performance

- The **±2 standard error bands** (red dashed lines) in the graph provide an estimate of uncertainty. When polling results shift dramatically, market movements can breach these confidence intervals, suggesting that new information (such as polling trends) significantly impacts prices.

- Since Theil's U coefficient (0.005766) is close to zero, the forecast model performs well overall. However, the high covariance proportion shows that unexpected news (such as surprising poll results or election debates) could still cause market movements that the model may not fully predict.

Polls influence investor sentiment, leading to market fluctuations that are often unpredictable. The forecast model captures general trends well but struggles with random price changes driven by unexpected polling shifts. To improve accuracy, incorporating political risk factors or real-time polling data could help refine the model's short-term predictions.

Summary & Conclusion

The analysis examines the relationship between polling data and financial market indicators, including stock indices, volatility indices (VIX), and Treasury yields. The descriptive statistics reveal that the average polling difference between candidates is 1.32, with a range from 2 points in favor of Trump to a 0-point tie. The stock indices (S&P 500 and NASDAQ) exhibited positive daily percentage changes, though not statistically significant. Market performance was stronger on days when Trump was leading in the polls, as indicated by higher daily returns, lower volatility, and reduced Treasury yields. The correlation analysis further highlights strong positive relationships between the S&P 500 and NASDAQ prices, while both indices exhibit a negative correlation with their respective VIX indices, reflecting the inverse relationship between stock prices and market volatility. The ARDL model results for the S&P 500 indicate that stock prices are primarily influenced by historical price trends and market volatility, while polling data does not show a significant impact. Similarly, the NASDAQ ARDL model suggests that asset prices and past values play a key role in determining market trends, while polling differences remain statistically insignificant.

Conclusion: The findings suggest that short-term stock market fluctuations are more closely tied to market volatility and asset price movements than political polling differences. While investors may react to election-related uncertainty, the data does not support a statistically significant relationship between polling trends and stock market performance. Instead, market fundamentals, historical trends, and macroeconomic factors such as Treasury yields have a more

substantial influence. The correlation analysis reinforces the notion that investor sentiment, reflected through volatility indices, plays a critical role in stock market movements. The rejection of the hypothesis (H_1 & H_2) that election outcomes significantly impact market dynamics further supports the argument that broader economic forces outweigh the effects of political uncertainty.

Implications: These findings have several implications for investors, policymakers, and financial analysts. Investors should focus on economic indicators and market fundamentals rather than reacting to political polling fluctuations. The insignificant effect of polling data suggests that market participants account for long-term economic conditions rather than short-term election cycles. For policymakers, understanding that financial markets are more sensitive to volatility and macroeconomic trends can help in designing economic policies that promote stability. Additionally, financial analysts should integrate market risk factors such as VIX and historical price trends into predictive models, as these factors have demonstrated stronger predictive power than political trends. Overall, this study emphasizes the need for a holistic approach to market analysis, recognizing that political uncertainty alone does not dictate financial market performance.

References

1. Alam, M. N., Alam, M. S., & Chavali, K. (2020). Stock market response during COVID-19 lockdown period in India: An event study. The Journal of Asian Finance, Economics and Business, 7(7), 131-137.
2.
3. Bilson, T., Smyth, R., & Wang, L. C. (2024). The looks and likes of a political winner: do social media engagement and electoral success go together? Australian Journal of Political Science, 1-17.
4. Brander, J. A., & Spencer, B. J. (1989). Moral hazard and limited liability: implications for the theory of the firm. *International economic review*, 833-849.
5. Chan, Y. C., & Wei, K. J. (1996). Political risk and stock price volatility: the case of Hong Kong. Pacific-Basin Finance Journal, 4(2-3), 259-275.

6. Cunha, R. (2024). Democracy and Markets in a Partially Globalized World: Local and Global Financial Market Responses to Elections in Developing Countries. International Studies Quarterly, 68(2), sqae017.
7. Duquette, C., Mixon, F. G., Cebula, R. J., & Upadhyaya, K. P. (2014). Prediction markets and election polling: Granger causality tests using InTrade and RealClearPolitics data. Atlantic Economic Journal, 42, 357-366.
8. Ejara, D. D., Nag, R., & Upadhyaya, K. P. (2012). Opinion polls and the stock market: evidence from the 2008 US presidential election. Applied Financial Economics, 22(6), 437-443.
9. Forsythe, R., Frank, M., Krishnamurthy, V., & Ross, T. W. (1995). Using market prices to predict election results: the 1993 UBC election stock market. Canadian Journal of Economics, 770-793.
10. Ho, S. Y., & Nijman Iyke, B. (2017). On the causal links between the stock market and the economy of Hong Kong. Contemporary Economics, 11(3).
11. Ioannidis, C., & Thompson, R. S. (1986). Political opinion polls and the stock market. Managerial and Decision Economics, 7(4), 267-271.
12. Jensen, N. M., & Schmith, S. (2005). Market responses to politics: The rise of Lula and the decline of the Brazilian stock market. *Comparative political studies*, *38*(10), 1245-1270.
13. Kim, H. Y., & Mei, J. (1994). Political risk and stock returns: The case of Hong Kong.
14. Kumar Deva, B., Sharon, S., & Maria, J. E. (2015). Empirical Study on Effects of the Lok Sabha Election on Stock Market Performance (BSE SENSEX). Research Journal of Management Sciences ISSN, 2319, 1171.
15. Mattozzi, A. (2008). Can we insure against political uncertainty? Evidence from the US stock market. Public Choice, 137, 43-55.
16. Thompson, A. J. (1993). The anticipated sectoral adjustment to the Canada-United States Free Trade Agreement: An event study analysis. Canadian Journal of Economics, 253-271.
17. Upadhyaya, K., Nag, R., & Ejara, D. (2024). The 2016 US presidential election, opinion polls and the stock market. Journal of Financial Economic Policy, 16(2), 194-204.

18. Zhang, D., & Broadstock, D. C. (2020). Global financial crisis and rising connectedness in the international commodity markets. International Review of Financial Analysis, 68, 101239.