# BAYESIAN LEARNING AND AUTOREGRESSIVE PERSISTENCE: ADAPTIVE FORECASTING OF THE DOW JONES INDUSTRIAL AVERAGE (2022–2025)

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#### Abstract

Financial markets operate as dynamic systems in which information and volatility interact continuously, challenging traditional forecasting models based on fixed historical patterns. This study compares Bayesian and Autoregressive (AR (1)) models for forecasting daily returns of the Dow Jones Industrial Average (DJIA) between October 2022 and October 2025, using daily open-close data (approx. 750 trading days). Using the EViews 12 Student Version, the analysis constructs daily percentage returns and each model through evaluates kev econometric indicators: Mean Absolute Error (MAE), Forecast Bias and newly introduced Adaptability metric.

Empirical results show that the AR (1) model achieves lower error and negligible bias, confirming its stability and persistence, whereas the Bayesian model exhibits higher MAE and modest positive bias but significantly greater adaptability. The Bayesian approach updates prior beliefs (0.55) into posterior probabilities (0.92) in response to market illustrating information assimilation enhances how responsiveness. Although less smooth, the Bayesian forecasts better capture short-term uncertainty and regime shift typical of modern equity markets. The findings demonstrate that Bayesian learning provides a flexible alternative to autoregressive persistence, offering a richer representation of how market expectations evolve under uncertainty. This research contributes to the econometric literature by operationalizing Bayesian inference within a standard forecasting environment and proposing adaptability as a quantitative measure of model responsiveness. The results have implications for both academic forecasting and practical investment decision-making in volatile market conditions.

# Keywords

Bayes' theorem; Bayesian inference; capital markets; financial forecasting; market uncertainty; adaptive decision-making; probabilistic modelling.

#### JEL Classification

C11, C58, G11, G17

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#### Introduction

In modern financial research, uncertainty is not merely an obstacle, it is an essential characteristic of the market system. Prices fluctuate, investor sentiment changes, and macroeconomic indicators evolve in ways that are difficult to predict with precision. Traditional econometric models often attempt to capture these movements through deterministic or frequentist frameworks, if market parameters remain stable over time. However, in a world defined by continuous information flow and behavioural responses, such assumptions rarely hold.

Bayes' theorem provides a probabilistic foundation for addressing this challenge. By allowing beliefs or model parameters to be updated as new evidence emerges, Bayesian inference offers a dynamic and adaptive approach to understanding market behaviour. In essence, Bayes' theorem transforms uncertainty from a limitation into a quantifiable dimension of analysis. It enables researchers and practitioners to express market predictions not as fixed outcomes but as evolving probabilities conditioned on incoming data.

The relevance of Bayesian reasoning in economics and finance has grown significantly in recent years. Various studies have explored its use in macroeconomic forecasting, risk management, and portfolio optimization. For instance, Bayesian Vector Autoregression (BVAR) has been employed to improve the forecasting of GDP growth, inflation, and interest rates, while Bayesian decision frameworks have been applied to optimize investment strategies under uncertainty. Yet, despite these promising applications, the adoption of Bayes' theorem within capital market research remains fragmented and often constrained to technical or theoretical explorations.

A preliminary review of Web of Science indexed publications from 2020 to 2024 reveals that most Bayesian studies focus on disciplines outside finance, particularly: medicine, public health, and artificial intelligence. Researchers such as Chan (2020) and Sidebotham (2020) have used Bayes' theorem to interpret diagnostic tests and evaluate clinical trial outcomes, while Prathan and Ow (2020) applied Bayesian logic to algorithmic decision-making in software engineering. In contrast, few studies have systematically explored how Bayesian inference could enhance financial decision-making, market forecasting, or investor behaviour modelling.

This observation defines the scope and objective of the present article: to identify and analyse the research gap in the financial literature concerning the application of Bayes' theorem, with its practical application on Dow Jones Industrial Average (DJIA) over the 3 years, from 21st October 2022 until 21st October 2025.

To be more specific, the paper aims to:

- Review the scientific literature on Bayesian applications in various disciplines
  to understand how the theory has evolved conceptually and methodologically,
  due to the large amount of data. A selected number of papers were selected to
  answer the scope of this article.
- Examine existing uses of Bayesian inference within economics and finance, highlighting their strengths and limitations.

 Identify the areas where Bayesian approaches remain underexplored, particularly in capital market forecasting, risk assessment, and behavioural modelling.

 Apply the Bayesian approach to a real practical case, where DJIA is analysed by an Autoregressive model and by Bayes' theorem to show the pros and cons of using the Bayes or Autoregressive model in analysing the capital market.

By addressing this gap, the study contributes to the ongoing development of modern financial econometrics and proposes new directions for research. The integration of Bayesian reasoning into finance offers a pathway toward models that continuously learn and adapt, mirroring the dynamic nature of real-world markets. Such models have the potential to improve prediction accuracy, quantify uncertainty more effectively and align computational analysis with human decision processes.

The remainder of the paper is structured as follows. The next section presents a review of the scientific literature, summarising recent developments and identifying conceptual trends. The research methodology section outlines the Bayesian framework adopted for the empirical illustration and explains how the data was analysed. The results and discussion section interprets the outcomes and connects them to the broader theoretical context, emphasizing how Bayesian inference can be leveraged to address gaps in current financial research.

## 1. Review of the scientific literature

Over the past decade, the increasing complexity of global capital markets has encouraged economists and financial analysts to adopt probabilistic approaches to decision-making. Traditional econometric models often rely on fixed parameters and static assumptions, which limit their adaptability in dynamic environments. In contrast, Bayesian inference provides a flexible framework for updating beliefs about market behaviour as new data becomes available.

The scientific literature on financial forecasting and time-series econometrics reveals a progressive evolution from linear deterministic models toward adaptive and probabilistic frameworks. Foundational contributions by Box and Jenkins (1976) and Hamilton (1994) established the theoretical basis for autoregressive and moving-average models, which remain central to time-series analysis. These models assume that past values contain sufficient information to predict future dynamics, a principle that underpins much of the classical econometric modelling tradition. Later works, such as Enders (2015) and Tsay (2010), refined these methods by introducing unit-root testing, cointegration analysis, and volatility modelling, thereby expanding the scope of empirical applications in finance.

However, the complex and nonlinear behaviour of capital markets has challenged the adequacy of purely autoregressive approaches. Financial time series often exhibit structural breaks, regime shifts, and time-varying volatility, features that static models may fail to capture. To address these limitations, researchers increasingly turned to Bayesian econometrics, which provides a flexible probabilistic structure for updating model parameters as new data emerge. According to Koop (2003) and Gelman et al. (2013), Bayesian inference allows the incorporation of prior information

and parameter uncertainty directly into the estimation process, yielding more robust predictions under conditions of limited or rapidly changing information.

The application of Bayesian methods to financial and macroeconomic forecasting has gained significant traction in the past two decades. Jacquier, Polson, and Rossi (2004) demonstrated the usefulness of Bayesian estimation in stochastic volatility models, showing that posterior distributions capture uncertainty more effectively than point estimates. Similarly, Avramov (2002) applied Bayesian learning to stock-return predictability, emphasizing that model uncertainty can be systematically managed through prior specification. In the macro forecasting domain, Clark and Ravazzolo (2015) found that Bayesian priors improve predictive accuracy compared to standard frequentist models, particularly during volatile economic periods. Schorfheide (2010) further highlighted the versatility of Bayesian techniques in financial econometrics, noting their capacity to combine initial information in a logical manner.

Beyond the Anglo-American literature, regional contributions have also enriched applied econometric understanding. In the Romanian academic context, Gruia G.C. (2025), provides a comprehensive overview of econometric modelling techniques, emphasizing the transition from deterministic to stochastic approaches and the growing relevance of adaptive models in economic analysis. His work aligns with international advances by underscoring the need for flexible methodologies that can integrate uncertainty and information asymmetry, core aspects of Bayesian reasoning, into modern econometric practice.

The integration of Bayesian inference with traditional econometric models has been explored across diverse domains. Zellner (1988) conceptualized Bayesian learning as an optimal information processing mechanism, laying the theoretical groundwork for dynamic belief updating. Empirical studies, such as those by Prathan and Ow (2020), Sidebotham (2020), and Robinson, A. et. al (2022), illustrate the practical application of Bayes' theorem across disciplines ranging from software engineering to medical diagnostics, demonstrating its universal adaptability.

Although these studies operate in different contexts, their common thread is the capacity of Bayesian frameworks to refine predictions as new evidence becomes available, a principle equally applicable to financial time series forecasting.

Within this broader academic landscape, the present research situates itself at the intersection of classical autoregressive modelling and modern Bayesian inference. By comparing the AR (1) model with a Bayesian updating framework using empirical data from the Dow Jones Industrial Average (DJIA), the study seeks to quantify differences in forecast accuracy, bias and adaptability.

This comparative approach reflects the current direction of econometric research, which increasingly values models capable of learning from new information rather than merely extrapolating historical patterns. Consequently, this study contributes to both the empirical literature on stock-market forecasting and the methodological discourse on integrating Bayesian thinking into operational econometric environments such as EViews.

## 2. Research Methodology

The research approach adopted in this study is primarily quantitative and conceptual, combining a review of recent academic contributions with a demonstration of Bayesian inference applied to financial time series. Eviews software was used to analyse and compute the required Bayesian and Autoregression (AR) models. The methodology follows three main stages:

## A) Data and Context Selection

The empirical analysis relies on a sample of daily open and close prices for the Dow Jones Industrial Average (DJIA) covering the period 21 October 2022 – 21 October 2025, totalling approximately 750 trading observations. The dataset was obtained from Yahoo Finance and processed in EViews 12 Student Version, as seen in the *Annex 1*.

# **B) Model Specification**

The study employs two forecasting specifications:

- (1) A first-order autoregressive model,  $R_t = \alpha + \beta R_{t-1} + \epsilon_t$ , estimated via ordinary least squares.
- (2) A Bayesian updating model that revises prior probabilities ( $p_0 = 0.5526 \approx 0.55$ ) into posteriors ( $p_1 = 0.9184 \approx 0.92$ ) as new evidence arises.

Forecast accuracy was assessed through Mean Absolute Error (MAE), Forecast Bias, and an Adaptability Index, computed as the relative adjustment between successive posterior updates.

The Bayesian framework begins with a prior distribution P(H), representing investors' initial beliefs about future price movements, and a likelihood function  $P(E \mid H)$ , reflecting the probability of observing new market evidence, such as earnings announcements or macroeconomic indicators, given the hypothesis. P(E) is the marginal probability of observing the evidence.

For empirical demonstration, simulated daily returns from Dow Jones Index (DJI) market were used. Prior probabilities were derived from historical average returns, while likelihoods were computed based on recent volatility indicators. The posterior probabilities were then used to generate buy or sell signals in a simplified trading simulation.

The posterior probability  $P(H \mid E)$  is then computed using Bayes' theorem:

$$P(H|E) = \frac{P(E|H) \cdot P(H)}{P(E)} \tag{1}$$

The posterior distribution represents the updated belief about the probability of a stock price increase after incorporating new information.

## C) Implementation and Evaluation

The Bayesian updating process was simulated using daily market data. Prior probabilities were based on the historical frequency of positive returns, while likelihoods were estimated from recent volatility patterns. The model's performance was compared to a classical autoregressive (AR) model to evaluate forecasting accuracy and adaptability.

#### 3. Results and discussion

The results demonstrate that the Bayesian updating framework provides a more flexible and responsive approach to forecasting stock price movements compared to traditional econometric models. Under conditions of market volatility, the Bayesian model adjusted its predictions more rapidly following information shocks, leading to improved short-term accuracy.

Table no. 1. Comparative forecasting accuracy, DJI, 2022-2025

Model	Mean Absolute Error (MAE)	Forecast bias	Adaptability score	Interpretation
AR	0.603	$-1.03 \cdot 10^{-16}$	$7.22 \times 10^{-6}$	Stable, persistent, less reactive
Bayesian model	0.842	0.0139	0.806	More responsive to new volatility, adaptive

Source: own computation

The comparative analysis between the traditional Autoregressive (AR (1)) model and the Bayesian Updating framework provides meaningful insights into the dynamics of the Dow Jones Industrial Average (DJIA) during the period from 21<sup>st</sup> October 2022 to 21<sup>st</sup> October 2025.

The research starts from the percent daily returns or changes of our index which is shown in Figure no. 1, which displays the stationarity of daily values of DJIA for the studied period, from 21<sup>st</sup> Oct 2022 until 21<sup>st</sup> Oct 2025. This a necessary condition for our Autoregressive (AR (1)) model to get rid of the initial variability of the index.

After computing the AR (1) and Bayesian forecast we want to see what the differences between them are and thus we illustrate them in Figure no. 2. One can see from this figure that while both models capture the general direction of market movement, the Bayesian forecast reacts more quickly to sudden changes in DJIA returns, confirming its greater adaptability compared to the smoother AR (1) trajectory (showed as red line in Fig.2). The Bayesian model (green line in Fig.2) follows market fluctuations more closely, highlighting its adaptive response to volatility.

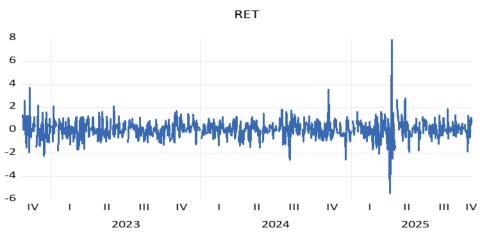


Figure no 1: Daily DJIA returns dynamics (2022 – 2025)

Source: own computation

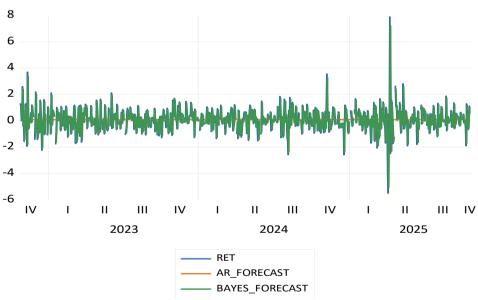


Figure no. 2: AR (1) vs Bayesian forecast comparison Source: own computation

This interval captures a complex market phase characterized by post pandemic recovery, inflationary pressures and periodic monetary tightening conditions that make the adaptability of forecasting models particularly relevant.

The estimated prior probability of 0.5526 indicates that, historically, the DJIA registered positive daily returns on approximately 55 % of trading days. This baseline probability serves as the foundation for the Bayesian approach, representing the market's long-term bias toward growth.

The likelihood value of 1.0126 suggests that volatility on days with positive returns was about 1.26 % higher than the overall average, implying that upward movements in the index were often accompanied by slightly elevated market activity.

After incorporating this new information, the posterior probability increased to 0.9184, signalling that the model's belief in a positive return strengthened markedly once recent volatility was considered. This result illustrates how Bayesian reasoning dynamically adjusts expectations: when evidence supports optimism, the updated probability of continuation in that direction rises accordingly.

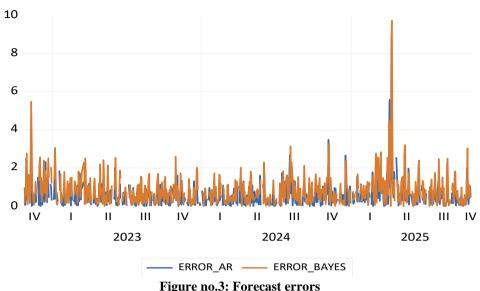
The forecast accuracy metrics derived from EViews reinforces these probabilistic interpretations. The AR (1) model produced a Mean Absolute Error (MAE) of 0.603 and a negligible Bias of  $-1.03 \times 10^{-16}$ , confirming its stability and near-unbiased nature. The Bayesian model, by contrast, exhibited a higher MAE of 0.842 and a small positive Bias of 0.0139. Although this indicates that Bayesian forecasts deviate more from actual returns on average, the increase in error magnitude reflects the model's greater sensitivity to new information rather than systematic misprediction. In volatile market environments, such responsiveness is often desirable because it allows forecasts to incorporate emerging signals more rapidly than stationary linear models.

To visualize better the forecast accuracy through time and identify periods of high or low performance (for example, during market shocks or clam phases) we have created the Figure no.3. The forecast errors are computed as the absolute value of the daily prediction error for each model:

$$error_{AR} = |ret - ar_{forecast}|$$
  
 $error_{Bayes} = |ret - bayes_{forecast}|$ 

The AR (1) model exhibits smaller but persistent deviations, whereas Bayesian model shows transient spikes followed by rapid corrections, reflecting its dynamic response to new information. In other words, Bayesian model exhibits higher short-term variability and faster error corrections aftermarket shocks.

The inclusion of an Adaptability metric further clarifies these behavioural differences. Calculated as the mean absolute day-to-day change in forecasted values, adaptability score quantifies how promptly a model reacts to shifting market conditions. The AR (1) model displayed a relatively low adaptability score (7.22  $\times$  10<sup>-6</sup>), consistent with its autoregressive persistence and tendency to smooth over short-term fluctuations. The Bayesian model, on the other hand, demonstrated a higher adaptability value (0.806), confirming its greater flexibility in updating expectations as volatility or return patterns evolved. In practical terms, this means that while the AR(1) model provides stable forecasts suitable for tranquil periods, the Bayesian approach is better suited for high-uncertainty regimes when investor sentiment and external information change rapidly.



Source: own computation

Overall, the empirical evidence suggests that applying Bayes' theorem to financial time series adds interpretative and forecasting value beyond conventional autoregressive techniques. By explicitly modelling how new evidence alters the probability of future outcomes, the Bayesian framework captures a fundamental feature of market behaviour, the continuous assimilation of information. This adaptability, while increasing short-term forecast variability, offers a more realistic representation of investor learning and expectation formation in the capital market.

# **Research Implications and Novel Contribution**

The results answered the research question which was developed as part of the research: Can Bayesian updating improve short-term forecasting adaptability compared to traditional autoregressive models in equity indices such as the Dow Jones Industrial Average?

The study finds that: Yes, Bayesian updating enhances adaptability and responsiveness to new information, even if it slightly sacrifices short-term smoothness in forecast accuracy. The novelty lies in combining a probabilistic belief-updating mechanism with standard econometric evaluation (MAE, Bias, Adaptability) within the EViews environment and applying it to a major stock index. This approach bridges theoretical Bayesian inference and empirical market forecasting, offering a replicable framework for analysing how information assimilation affects price dynamics.

## **Conclusions**

This study set out to evaluate whether Bayesian updating offers tangible advantages over traditional autoregressive modeling in forecasting the daily performance of the

Dow Jones Industrial Average. Using Eviews based estimations for the period 21<sup>st</sup> October 2022 to 21<sup>st</sup> October 2025, two models were constructed and compared: a classical AR(1) process and a Bayesian Updating model derived from probabilistic reasoning. The comparative metrics: Mean Absolute Error, Forecast Bias and Adaptability, revealed distinct behavioral patterns between the two approaches.

The AR(1) model demonstrated stability and near zero bias, confirming its effectiveness in capturing persistent linear dynamics of market returns. However, its low adaptability indicates limited responsiveness to new information, making it less suitable for periods of rapid market change or heightened volatility. Conversely, the Bayesian Updating model exhibited greater variability in forecasts (higher MAE) but also markedly higher adaptability. This behavior reflects its theoretical foundation: Bayesian inference continuously revises prior beliefs when confronted with new evidence, in this case proxied by changes in volatility. The resulting posterior probability of 0.918 suggests that, given the observed conditions, the likelihood of a positive return in the DJIA was substantially reinforced by recent market signals.

From an applied perspective, these findings show that Bayesian reasoning can enhance the interpretative depth of capital market forecasting. Rather than relying solely on historical persistence, the Bayesian framework incorporates informational flow, which is a core characteristic of real world financial decision making. This makes it particularly valuable for short term forecasting, risk assessment and algorithmic trading strategies that must adapt to continuous data updates.

The novelty of this research lies in integrating a theoretical Bayesian model within a practical econometric environment (EViews 12 Student Version), allowing direct estimation, forecast generation, and performance comparison using real market data. By introducing the Adaptability metric, the study adds a new dimension to forecasting evaluation, emphasizing how models respond to volatile or information rich conditions, an aspect often neglected in traditional accuracy focused assessments.

A limitation of this study lies in the use of a single index and a three-year window, which may not fully capture long-term structural breaks.

Future research may extend this analysis to multivariate models and alternative market indices, like incorporating additional market variables such as trading volume, interest rates, or macroeconomic indicators into the likelihood function could refine posterior estimation and improve predictive precision.

Evaluating Bayesian forecasts against volatility adjusted models (e.g., GARCH) or adaptive learning algorithms would clarify the relative efficiency of probabilistic updating under different market regimes.

Applying Bayesian updating to intra-day or regime switching data may reveal how information assimilation operates at shorter time horizons or during structural breaks.

Future work could link Bayesian probabilities to investor sentiment indicators or news analytics, bridging quantitative modeling with behavioral finance perspectives.

In conclusion, while the AR(1) model remains a reliable baseline for time series forecasting, the Bayesian Updating framework captures the dynamic learning process inherent in financial markets. By formally quantifying how new information shifts market expectations, this approach enriches both theoretical understanding and practical

forecasting accuracy, marking a promising direction for future econometric and financial analytics research.

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Annex 1

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Date	Close	Open	Date	Close	Open	Date	Close	Open
10/21/2025	46,971.20	46,707.08	10/21/2024	42,931.60	43,222.21	10/20/2023	33,127.28	33,365.27
10/20/2025	46,706.58	46,312.88	10/18/2024	43,275.91	43,187.12	10/19/2023	33,414.17	33,669.52
10/17/2025	46,190.61	45,862.37	10/17/2024	43,239.05	43,119.81	10/18/2023	33,665.08	33,960.25
10/16/2025	45,952.24	46,289.09	10/16/2024	43,077.70	42,706.49	10/17/2023	33,997.65	33,869.84
10/15/2025	46,253.31	46,375.17	10/15/2024	42,740.42	43,240.17	10/16/2023	33,984.54	33,832.42
10/14/2025	46,270.46	45,871.89	10/14/2024	43,065.22	42,800.89	10/13/2023	33,670.29	33,733.34
10/13/2025	46,067.58	45,698.46	10/11/2024	42,863.86	42,507.53	10/12/2023	33,631.14	33,845.65
10/10/2025	45,479.60	46,394.88	10/10/2024	42,454.12	42,511.37	10/11/2023	33,804.87	33,822.20
10/9/2025	46,358.42	46,622.31	10/9/2024	42,512.00	42,070.32	10/10/2023	33,739.30	33,683.41
10/8/2025	46,601.78	46,649.32	10/8/2024	42,080.37	42,022.65	10/9/2023	33,604.65	33,259.84
10/7/2025	46,602.98	46,700.90	10/7/2024	41,954.24	42,289.51	10/6/2023	33,407.58	33,040.70
10/6/2025	46,694.97	46,776.04	10/4/2024	42,352.75	42,248.26	10/5/2023	33,119.57	33,099.23
10/3/2025	46,758.28	46,583.95	10/3/2024	42,011.59	42,099.53	10/4/2023	33,129.55	33,034.18
10/2/2025	46,519.72	46,461.11	10/2/2024	42,196.52	42,125.14	10/3/2023	33,002.38	33,318.84
10/1/2025	46,441.10	46,366.78	10/1/2024	42,156.97	42,262.97	10/2/2023	33,433.35	33,455.50
9/30/2025	46,397.89	46,282.63	9/30/2024	42,330.15	42,289.75	9/29/2023	33,507.50	33,882.61
9/29/2025	46,316.07	46,306.34	9/27/2024	42,313.00	42,227.95	9/28/2023	33,666.34	33,519.44
9/26/2025	46,247.29	46,101.45	9/26/2024	42,175.11	42,113.42	9/27/2023	33,550.27	33,682.81
9/25/2025	45,947.32	46,097.43	9/25/2024	41,914.75	42,236.09	9/26/2023	33,618.88	33,862.68
9/24/2025	46,121.28	46,368.94	9/24/2024	42,208.22	42,234.99	9/25/2023	34,006.88	33,907.59
9/23/2025	46,292.78	46,364.11	9/23/2024	42,124.65	42,060.40	9/22/2023	33,963.84	34,077.08
9/22/2025	46,381.54	46,206.69	9/20/2024	42,063.36	41,959.43	9/21/2023	34,070.42	34,332.23
9/19/2025	46,315.27	46,211.16	9/19/2024	42,025.19	41,972.56	9/20/2023	34,440.88	34,575.50
9/18/2025	46,142.42	46,056.55	9/18/2024	41,503.10	41,628.91	9/19/2023	34,517.73	34,571.84
9/17/2025	46,018.32	45,778.40	9/17/2024	41,606.18	41,723.78	9/18/2023	34,624.30	34,612.29
9/16/2025	45,757.90	45,919.54	9/16/2024	41,622.08	41,435.17	9/15/2023	34,618.24	34,902.04
9/15/2025	45,883.45	45,848.39	9/13/2024	41,393.78	41,153.70	9/14/2023	34,907.11	34,687.50
9/12/2025	45,834.22	46,077.14	9/12/2024	41,096.77	40,862.11	9/13/2023	34,575.53	34,667.28
9/11/2025	46,108.00	45,577.09	9/11/2024	40,861.71	40,638.76	9/12/2023	34,645.99	34,620.02
9/10/2025	45,490.92	45,731.50	9/10/2024	40,736.96	40,916.50	9/11/2023	34,663.72	34,650.01
9/9/2025	45,711.34	45,547.62	9/9/2024	40,829.59	40,555.11	9/8/2023	34,576.59	34,487.41
9/8/2025	45,514.95	45,430.61	9/6/2024	40,345.41	40,756.81	9/7/2023	34,500.73	34,351.18

Date	Close	Open	Date	Close	Open	Date	Close	Open
9/5/2025	45,400.86	45,656.49	9/5/2024	40,755.75	41,056.33	9/6/2023	34,443.19	34,611.68
9/4/2025	45,621.29	45,204.87	9/4/2024	40,974.97	40,872.06	9/5/2023	34,641.97	34,843.22
9/3/2025	45,271.23	45,309.43	9/3/2024	40,936.93	41,489.67	9/1/2023	34,837.71	34,876.24
9/2/2025	45,295.81	45,287.73	8/30/2024	41,563.08	41,366.16	8/31/2023	34,721.91	34,909.09
8/29/2025	45,544.88	45,590.96	8/29/2024	41,335.05	41,345.50	8/30/2023	34,890.24	34,847.80
8/28/2025	45,636.90	45,581.03	8/28/2024	41,091.42	41,250.17	8/29/2023	34,852.67	34,531.12
8/27/2025	45,565.23	45,417.46	8/27/2024	41,250.50	41,186.28	8/28/2023	34,559.98	34,441.64
8/26/2025	45,418.07	45,236.83	8/26/2024	41,240.52	41,200.84	8/25/2023	34,346.90	34,217.06
8/25/2025	45,282.47	45,605.25	8/23/2024	41,175.08	40,879.12	8/24/2023	34,099.42	34,439.83
8/22/2025	45,631.74	44,952.88	8/22/2024	40,712.78	40,932.23	8/23/2023	34,472.98	34,338.59
8/21/2025	44,785.50	44,808.21	8/21/2024	40,890.49	40,881.03	8/22/2023	34,288.83	34,494.17
8/20/2025	44,938.31	44,922.70	8/20/2024	40,834.97	40,874.52	8/21/2023	34,463.69	34,531.28
8/19/2025	44,922.27	44,952.36	8/19/2024	40,896.53	40,670.83	8/18/2023	34,500.66	34,368.36
8/18/2025	44,911.82	44,963.17	8/16/2024	40,659.76	40,528.86	8/17/2023	34,474.83	34,829.61
8/15/2025	44,946.12	45,159.91	8/15/2024	40,563.06	40,295.74	8/16/2023	34,765.74	34,914.96
8/14/2025	44,911.26	44,890.84	8/14/2024	40,008.39	39,800.59	8/15/2023	34,946.39	35,219.37
8/13/2025	44,922.27	44,571.53	8/13/2024	39,765.64	39,445.27	8/14/2023	35,307.63	35,273.89
8/12/2025	44,458.61	44,050.53	8/12/2024	39,357.01	39,556.01	8/11/2023	35,281.40	35,111.36
8/11/2025	43,975.09	44,184.36	8/9/2024	39,497.54	39,408.06	8/10/2023	35,176.15	35,231.54
8/8/2025	44,175.61	44,044.95	8/8/2024	39,446.49	38,940.38	8/9/2023	35,123.36	35,324.28
8/7/2025	43,968.64	44,430.09	8/7/2024	38,763.45	39,230.09	8/8/2023	35,314.49	35,345.40
8/6/2025	44,193.12	44,196.61	8/6/2024	38,997.66	38,736.22	8/7/2023	35,473.13	35,125.60
8/5/2025	44,111.74	44,200.07	8/5/2024	38,703.27	39,056.19	8/4/2023	35,065.62	35,230.13
8/4/2025	44,173.64	43,724.02	8/2/2024	39,737.26	40,075.33	8/3/2023	35,215.89	35,194.56
8/1/2025	43,588.58	43,781.77	8/1/2024	40,347.97	40,916.96	8/2/2023	35,282.52	35,551.92
7/31/2025	44,130.98	44,665.82	7/31/2024	40,842.79	40,768.88	8/1/2023	35,630.68	35,585.99
7/30/2025	44,461.28	44,677.90	7/30/2024	40,743.33	40,622.13	7/31/2023	35,559.53	35,465.97
7/29/2025	44,632.99	44,833.74	7/29/2024	40,539.93	40,665.71	7/28/2023	35,459.29	35,443.49
7/28/2025	44,837.56	44,946.98	7/26/2024	40,589.34	40,140.86	7/27/2023	35,282.72	35,558.79
7/25/2025	44,901.92	44,757.28	7/25/2024	39,935.07	39,828.63	7/26/2023	35,520.12	35,345.99
7/24/2025	44,693.91	44,776.41	7/24/2024	39,853.87	40,210.63	7/25/2023	35,438.07	35,421.49
7/23/2025	45,010.29	44,661.12	7/23/2024	40,358.09	40,443.73	7/24/2023	35,411.24	35,230.79
7/22/2025	44,502.44	44,338.62	7/22/2024	40,415.44	40,414.49	7/21/2023	35,227.69	35,274.32

Date	Close	Open	Date	Close	Open	Date	Close	Open
7/21/2025	44,323.07	44,368.40	7/19/2024	40,287.53	40,592.35	7/20/2023	35,225.18	35,091.98
7/18/2025	44,342.19	44,571.68	7/18/2024	40,665.02	41,156.56	7/19/2023	35,061.21	34,991.21
7/17/2025	44,484.49	44,229.88	7/17/2024	41,198.08	40,862.57	7/18/2023	34,951.93	34,597.08
7/16/2025	44,254.78	44,152.74	7/16/2024	40,954.48	40,263.78	7/17/2023	34,585.35	34,499.74
7/15/2025	44,023.29	44,459.84	7/15/2024	40,211.72	40,138.40	7/14/2023	34,509.03	34,425.33
7/14/2025	44,459.65	44,346.15	7/12/2024	40,000.90	39,783.28	7/13/2023	34,395.14	34,412.31
7/11/2025	44,371.51	44,480.77	7/11/2024	39,753.75	39,695.18	7/12/2023	34,347.43	34,395.28
7/10/2025	44,650.64	44,427.75	7/10/2024	39,721.36	39,272.45	7/11/2023	34,261.42	34,056.94
7/9/2025	44,458.30	44,327.13	7/9/2024	39,291.97	39,357.37	7/10/2023	33,944.40	33,705.68
7/8/2025	44,240.76	44,378.58	7/8/2024	39,344.79	39,391.98	7/7/2023	33,734.88	33,837.07
7/7/2025	44,406.36	44,803.36	7/5/2024	39,375.87	39,313.40	7/6/2023	33,922.26	34,171.39
7/3/2025	44,828.53	44,565.75	7/3/2024	39,308.00	39,358.95	7/5/2023	34,288.64	34,344.72
7/2/2025	44,484.42	44,455.66	7/2/2024	39,331.85	39,108.25	7/3/2023	34,418.47	34,369.78
7/1/2025	44,494.94	44,061.49	7/1/2024	39,169.52	39,186.20	6/30/2023	34,407.60	34,269.92
6/30/2025	44,094.77	44,020.66	6/28/2024	39,118.86	39,092.39	6/29/2023	34,122.42	33,854.57
6/27/2025	43,819.27	43,505.60	6/27/2024	39,164.06	39,107.10	6/28/2023	33,852.66	33,881.38
6/26/2025	43,386.84	43,084.07	6/26/2024	39,127.80	39,063.15	6/27/2023	33,926.74	33,739.03
6/25/2025	42,982.43	43,130.33	6/25/2024	39,112.16	39,398.79	6/26/2023	33,714.71	33,730.79
6/24/2025	43,089.02	42,807.13	6/24/2024	39,411.21	39,184.49	6/23/2023	33,727.43	33,835.66
6/23/2025	42,581.78	42,178.55	6/21/2024	39,150.33	39,208.51	6/22/2023	33,946.71	33,900.47
6/20/2025	42,206.82	42,291.09	6/20/2024	39,134.76	38,804.73	6/21/2023	33,951.52	33,990.56
6/18/2025	42,171.66	42,236.03	6/18/2024	38,834.86	38,779.12	6/20/2023	34,053.87	34,206.66
6/17/2025	42,215.80	42,358.62	6/17/2024	38,778.10	38,565.18	6/16/2023	34,299.12	34,464.02
6/16/2025	42,515.09	42,300.13	6/14/2024	38,589.16	38,528.39	6/15/2023	34,408.06	33,945.98
6/13/2025	42,197.79	42,579.48	6/13/2024	38,647.10	38,677.12	6/14/2023	33,979.33	34,044.70
6/12/2025	42,967.62	42,737.36	6/12/2024	38,712.21	38,950.65	6/13/2023	34,212.12	34,111.08
6/11/2025	42,865.77	42,882.86	6/11/2024	38,747.42	38,795.71	6/12/2023	34,066.33	33,906.80
6/10/2025	42,866.87	42,738.27	6/10/2024	38,868.04	38,784.90	6/9/2023	33,876.78	33,852.44
6/9/2025	42,761.76	42,786.19	6/7/2024	38,798.99	38,861.24	6/8/2023	33,833.61	33,656.98
6/6/2025	42,762.87	42,631.82	6/6/2024	38,886.17	38,825.40	6/7/2023	33,665.02	33,562.47
6/5/2025	42,319.74	42,487.89	6/5/2024	38,807.33	38,774.82	6/6/2023	33,573.28	33,547.67
6/4/2025	42,427.74	42,574.13	6/4/2024	38,711.29	38,518.86	6/5/2023	33,562.86	33,771.13
6/3/2025	42,519.64	42,304.50	6/3/2024	38,571.03	38,709.99	6/2/2023	33,762.76	33,187.58

Date	Close	Open	Date	Close	Open	Date	Close	Open
6/2/2025	42,305.48	42,199.94	5/31/2024	38,686.32	38,140.26	6/1/2023	33,061.57	32,929.85
5/30/2025	42,270.07	42,192.35	5/30/2024	38,111.48	38,368.35	5/31/2023	32,908.27	32,948.71
5/29/2025	42,215.73	42,190.02	5/29/2024	38,441.54	38,716.28	5/30/2023	33,042.78	33,103.65
5/28/2025	42,098.70	42,361.63	5/28/2024	38,852.86	39,028.99	5/26/2023	33,093.34	32,795.50
5/27/2025	42,343.65	41,849.04	5/24/2024	39,069.59	39,089.23	5/25/2023	32,764.65	32,854.26
5/23/2025	41,603.07	41,525.70	5/23/2024	39,065.26	39,694.95	5/24/2023	32,799.92	33,021.76
5/22/2025	41,859.09	41,763.68	5/22/2024	39,671.04	39,863.33	5/23/2023	33,055.51	33,190.60
5/21/2025	41,860.44	42,354.46	5/21/2024	39,872.99	39,804.40	5/22/2023	33,286.58	33,408.54
5/20/2025	42,677.24	42,735.11	5/20/2024	39,806.77	39,989.76	5/19/2023	33,426.63	33,582.95
5/19/2025	42,792.07	42,542.81	5/17/2024	40,003.59	39,911.72	5/18/2023	33,535.91	33,374.56
5/16/2025	42,654.74	42,356.20	5/16/2024	39,869.38	39,912.34	5/17/2023	33,420.77	33,092.48
5/15/2025	42,322.75	41,777.98	5/15/2024	39,908.00	39,615.10	5/16/2023	33,012.14	33,275.37
5/14/2025	42,051.06	42,150.09	5/14/2024	39,558.11	39,466.76	5/15/2023	33,348.60	33,321.21
5/13/2025	42,140.43	42,507.33	5/13/2024	39,431.51	39,591.28	5/12/2023	33,300.62	33,370.58
5/12/2025	42,410.10	41,899.05	5/10/2024	39,512.84	39,466.52	5/11/2023	33,309.51	33,383.89
5/9/2025	41,249.38	41,405.48	5/9/2024	39,387.76	39,064.27	5/10/2023	33,531.33	33,707.20
5/8/2025	41,368.45	41,312.57	5/8/2024	39,056.39	38,818.90	5/9/2023	33,561.81	33,589.85
5/7/2025	41,113.97	40,956.08	5/7/2024	38,884.26	38,858.94	5/8/2023	33,618.69	33,715.15
5/6/2025	40,829.00	41,000.19	5/6/2024	38,852.27	38,762.43	5/5/2023	33,674.38	33,248.55
5/5/2025	41,218.83	41,173.38	5/3/2024	38,675.68	38,709.36	5/4/2023	33,127.74	33,347.78
5/2/2025	41,317.43	40,960.42	5/2/2024	38,225.66	38,075.65	5/3/2023	33,414.24	33,726.64
5/1/2025	40,752.96	40,918.04	5/1/2024	37,903.29	37,845.56	5/2/2023	33,684.53	34,017.62
4/30/2025	40,669.36	40,290.41	4/30/2024	37,815.92	38,337.40	5/1/2023	34,051.70	34,116.81
4/29/2025	40,527.62	40,233.98	4/29/2024	38,386.09	38,282.16	4/28/2023	34,098.16	33,797.43
4/28/2025	40,227.59	40,171.74	4/26/2024	38,239.66	38,114.70	4/27/2023	33,826.16	33,381.66
4/25/2025	40,113.50	40,045.73	4/25/2024	38,085.80	38,052.09	4/26/2023	33,301.87	33,596.34
4/24/2025	40,093.40	39,531.05	4/24/2024	38,460.92	38,552.79	4/25/2023	33,530.83	33,828.34
4/23/2025	39,606.57	39,815.01	4/23/2024	38,503.69	38,356.07	4/24/2023	33,875.40	33,805.04
4/22/2025	39,186.98	38,516.23	4/22/2024	38,239.98	38,116.89	4/21/2023	33,808.96	33,793.60
4/21/2025	38,170.41	38,906.04	4/19/2024	37,986.40	37,801.98	4/20/2023	33,786.62	33,740.60
4/17/2025	39,142.23	39,745.58	4/18/2024	37,775.38	37,847.21	4/19/2023	33,897.01	33,889.83
4/16/2025	39,669.39	40,179.49	4/17/2024	37,753.31	37,949.67	4/18/2023	33,976.63	33,965.16
4/15/2025	40,368.96	40,527.82	4/16/2024	37,798.97	37,992.22	4/17/2023	33,987.18	33,930.46

Date	Close	Open	Date	Close	Open	Date	Close	Open
4/14/2025	40,524.79	40,546.15	4/15/2024	37,735.11	38,075.38	4/14/2023	33,886.47	33,981.71
4/11/2025	40,212.71	39,493.42	4/12/2024	37,983.24	38,319.14	4/13/2023	34,029.69	33,668.97
4/10/2025	39,593.66	39,996.93	4/11/2024	38,459.08	38,523.26	4/12/2023	33,646.50	33,764.21
4/9/2025	40,608.45	37,387.91	4/10/2024	38,461.51	38,662.28	4/11/2023	33,684.79	33,586.75
4/8/2025	37,645.59	38,827.10	4/9/2024	38,883.67	38,983.66	4/10/2023	33,586.52	33,425.25
4/7/2025	37,965.60	37,879.65	4/8/2024	38,892.80	38,916.42	4/6/2023	33,485.29	33,420.96
4/4/2025	38,314.86	40,097.90	4/5/2024	38,904.04	38,664.98	4/5/2023	33,482.72	33,394.60
4/3/2025	40,545.93	40,986.52	4/4/2024	38,596.98	39,343.60	4/4/2023	33,402.38	33,594.79
4/2/2025	42,225.32	41,736.08	4/3/2024	39,127.14	39,139.59	4/3/2023	33,601.15	33,245.78
4/1/2025	41,989.96	41,879.75	4/2/2024	39,170.24	39,256.27	3/31/2023	33,274.15	32,901.96
3/31/2025	42,001.76	41,382.52	4/1/2024	39,566.85	39,807.93	3/30/2023	32,859.03	32,807.43
3/28/2025	41,583.90	42,245.82	3/28/2024	39,807.37	39,763.74	3/29/2023	32,717.60	32,566.54
3/27/2025	42,299.70	42,432.96	3/27/2024	39,760.08	39,461.98	3/28/2023	32,394.25	32,434.85
3/26/2025	42,454.79	42,655.85	3/26/2024	39,282.33	39,338.32	3/27/2023	32,432.08	32,276.72
3/25/2025	42,587.50	42,635.54	3/25/2024	39,313.64	39,410.54	3/24/2023	32,237.53	32,038.22
3/24/2025	42,583.32	42,180.14	3/22/2024	39,475.90	39,774.06	3/23/2023	32,105.25	32,101.49
3/21/2025	41,985.35	41,763.40	3/21/2024	39,781.37	39,661.03	3/22/2023	32,030.11	32,570.19
3/20/2025	41,953.32	41,795.26	3/20/2024	39,512.13	39,072.05	3/21/2023	32,560.60	32,420.71
3/19/2025	41,964.63	41,613.19	3/19/2024	39,110.76	38,819.61	3/20/2023	32,244.58	31,872.33
3/18/2025	41,581.31	41,772.91	3/18/2024	38,790.43	38,826.93	3/17/2023	31,861.98	32,217.32
3/17/2025	41,841.63	41,460.22	3/15/2024	38,714.77	38,809.65	3/16/2023	32,246.55	31,827.65
3/14/2025	41,488.19	41,057.57	3/14/2024	38,905.66	39,122.39	3/15/2023	31,874.57	31,759.87
3/13/2025	40,813.57	41,280.05	3/13/2024	39,043.32	39,054.58	3/14/2023	32,155.40	32,055.29
3/12/2025	41,350.93	41,577.50	3/12/2024	39,005.49	38,883.32	3/13/2023	31,819.14	31,819.93
3/11/2025	41,433.48	41,837.95	3/11/2024	38,769.66	38,667.21	3/10/2023	31,909.64	32,185.14
3/10/2025	41,911.71	42,507.65	3/8/2024	38,722.69	38,776.80	3/9/2023	32,254.86	32,876.83
3/7/2025	42,801.72	42,503.07	3/7/2024	38,791.35	38,784.30	3/8/2023	32,798.40	32,872.08
3/6/2025	42,579.08	42,848.49	3/6/2024	38,661.05	38,721.15	3/7/2023	32,856.46	33,428.31
3/5/2025	43,006.59	42,518.37	3/5/2024	38,585.19	38,906.98	3/6/2023	33,431.44	33,425.32
3/4/2025	42,520.99	43,040.30	3/4/2024	38,989.83	38,968.77	3/3/2023	33,390.97	33,076.33
3/3/2025	43,191.24	43,900.49	3/1/2024	39,087.38	38,989.51	3/2/2023	33,003.57	32,780.97
2/28/2025	43,840.91	43,259.84	2/29/2024	38,996.39	39,013.75	3/1/2023	32,661.84	32,656.37
2/27/2025	43,239.50	43,516.44	2/28/2024	38,949.02	38,938.08	2/28/2023	32,656.70	32,873.47

Date	Close	Open	Date	Close	Open	Date	Close	Open
2/26/2025	43,433.12	43,635.42	2/27/2024	38,972.41	39,087.90	2/27/2023	32,889.09	32,906.16
2/25/2025	43,621.16	43,509.74	2/26/2024	39,069.23	39,144.79	2/24/2023	32,816.92	32,999.19
2/24/2025	43,461.21	43,493.12	2/23/2024	39,131.53	39,127.97	2/23/2023	33,153.91	33,175.39
2/21/2025	43,428.02	43,820.13	2/22/2024	39,069.11	38,845.19	2/22/2023	33,045.09	33,169.33
2/20/2025	44,176.65	44,561.11	2/21/2024	38,612.24	38,483.66	2/21/2023	33,129.59	33,699.69
2/19/2025	44,627.59	44,478.12	2/20/2024	38,563.80	38,576.26	2/17/2023	33,826.69	33,677.01
2/18/2025	44,556.34	44,583.91	2/16/2024	38,627.99	38,751.71	2/16/2023	33,696.85	33,992.09
2/14/2025	44,546.08	44,720.99	2/15/2024	38,773.12	38,397.94	2/15/2023	34,128.05	34,008.63
2/13/2025	44,711.43	44,425.94	2/14/2024	38,424.27	38,372.67	2/14/2023	34,089.27	34,194.09
2/12/2025	44,368.56	44,357.70	2/13/2024	38,272.75	38,699.17	2/13/2023	34,245.93	33,887.39
2/11/2025	44,593.65	44,401.38	2/12/2024	38,797.38	38,656.76	2/10/2023	33,869.27	33,671.54
2/10/2025	44,470.41	44,396.92	2/9/2024	38,671.69	38,731.97	2/9/2023	33,699.88	34,105.61
2/7/2025	44,303.40	44,762.57	2/8/2024	38,726.33	38,702.11	2/8/2023	33,949.01	34,132.90
2/6/2025	44,747.63	44,949.19	2/7/2024	38,677.36	38,613.89	2/7/2023	34,156.69	33,769.78
2/5/2025	44,873.28	44,563.63	2/6/2024	38,521.36	38,392.90	2/6/2023	33,891.02	33,874.44
2/4/2025	44,556.04	44,469.46	2/5/2024	38,380.12	38,546.77	2/3/2023	33,926.01	33,926.30
2/3/2025	44,421.91	44,268.15	2/2/2024	38,654.42	38,448.10	2/2/2023	34,053.94	34,129.30
1/31/2025	44,544.66	45,054.36	2/1/2024	38,519.84	38,175.34	2/1/2023	34,092.96	34,039.60
1/30/2025	44,882.13	44,548.69	1/31/2024	38,150.30	38,426.78	1/31/2023	34,086.04	33,803.56
1/29/2025	44,713.52	44,819.55	1/30/2024	38,467.31	38,298.23	1/30/2023	33,717.09	33,909.21
1/28/2025	44,850.35	44,756.36	1/29/2024	38,333.45	38,115.83	1/27/2023	33,978.08	33,952.93
1/27/2025	44,713.58	44,148.84	1/26/2024	38,109.43	38,006.68	1/26/2023	33,949.41	33,771.66
1/24/2025	44,424.25	44,533.75	1/25/2024	38,049.13	37,862.57	1/25/2023	33,743.84	33,538.36
1/23/2025	44,565.07	44,113.55	1/24/2024	37,806.39	37,975.37	1/24/2023	33,733.96	33,444.72
1/22/2025	44,156.73	44,178.06	1/23/2024	37,905.45	37,959.79	1/23/2023	33,629.56	33,439.56
1/21/2025	44,025.81	43,528.65	1/22/2024	38,001.81	37,919.55	1/20/2023	33,375.49	33,073.46
1/17/2025	43,487.83	43,312.55	1/19/2024	37,863.80	37,572.50	1/19/2023	33,044.56	33,171.35
1/16/2025	43,153.13	43,290.25	1/18/2024	37,468.61	37,300.81	1/18/2023	33,296.96	33,948.49
1/15/2025	43,221.55	42,927.76	1/17/2024	37,266.67	37,281.86	1/17/2023	33,910.85	34,222.32
1/14/2025	42,518.28	42,366.42	1/16/2024	37,361.12	37,493.54	1/13/2023	34,302.61	34,075.31
1/13/2025	42,297.12	41,924.68	1/12/2024	37,592.98	37,818.05	1/12/2023	34,189.97	34,047.86
1/10/2025	41,938.45	42,540.29	1/11/2024	37,711.02	37,747.14	1/11/2023	33,973.01	33,754.03
1/8/2025	42,635.20	42,542.10	1/10/2024	37,695.73	37,552.91	1/10/2023	33,704.10	33,516.43

Date	Close	Open	Date	Close	Open	Date	Close	Open
1/7/2025	42,528.36	42,809.71	1/9/2024	37,525.16	37,523.55	1/9/2023	33,517.65	33,664.39
1/6/2025	42,706.56	42,835.52	1/8/2024	37,683.01	37,327.37	1/6/2023	33,630.61	33,055.30
1/3/2025	42,732.13	42,495.76	1/5/2024	37,466.11	37,455.46	1/5/2023	32,930.08	33,191.72
1/2/2025	42,392.27	42,660.09	1/4/2024	37,440.34	37,425.28	1/4/2023	33,269.77	33,165.14
12/31/2024	42,544.22	42,636.70	1/3/2024	37,430.19	37,629.23	1/3/2023	33,136.37	33,148.90
12/30/2024	42,573.73	42,863.86	1/2/2024	37,715.04	37,566.22	12/30/2022	33,147.25	33,121.61
12/27/2024	42,992.21	43,142.37	12/29/2023	37,689.54	37,701.63	12/29/2022	33,220.80	33,021.43
12/26/2024	43,325.80	43,201.85	12/28/2023	37,710.10	37,661.52	12/28/2022	32,875.71	33,264.76
12/25/2024	43,297.03	42,916.48	12/27/2023	37,656.52	37,518.62	12/27/2022	33,241.56	33,224.23
12/24/2024	43,297.03	42,916.48	12/26/2023	37,545.33	37,405.90	12/23/2022	33,203.93	32,961.06
12/23/2024	42,906.95	42,800.49	12/22/2023	37,385.97	37,349.27	12/22/2022	33,027.49	33,233.35
12/20/2024	42,840.26	42,296.26	12/21/2023	37,404.35	37,225.32	12/21/2022	33,376.48	33,028.09
12/19/2024	42,342.24	42,464.13	12/20/2023	37,082.00	37,520.13	12/20/2022	32,849.74	32,735.24
12/18/2024	42,326.87	43,459.72	12/19/2023	37,557.92	37,311.82	12/19/2022	32,757.54	32,921.45
12/17/2024	43,449.90	43,656.47	12/18/2023	37,306.02	37,330.14	12/16/2022	32,920.46	33,166.46
12/16/2024	43,717.48	43,825.76	12/15/2023	37,305.16	37,194.50	12/15/2022	33,202.22	33,773.00
12/13/2024	43,828.06	43,929.15	12/14/2023	37,248.35	37,115.63	12/14/2022	33,966.35	34,086.07
12/12/2024	43,914.12	44,168.66	12/13/2023	37,090.24	36,601.80	12/13/2022	34,108.64	34,268.44
12/11/2024	44,148.56	44,300.41	12/12/2023	36,577.94	36,442.10	12/12/2022	34,005.04	33,519.50
12/10/2024	44,247.83	44,291.57	12/11/2023	36,404.93	36,254.33	12/9/2022	33,476.46	33,746.71
12/9/2024	44,401.93	44,637.97	12/8/2023	36,247.87	36,084.82	12/8/2022	33,781.48	33,695.97
12/6/2024	44,642.52	44,824.29	12/7/2023	36,117.38	36,124.17	12/7/2022	33,597.92	33,556.40
12/5/2024	44,765.71	45,038.44	12/6/2023	36,054.43	36,183.73	12/6/2022	33,596.34	33,936.87
12/4/2024	45,014.04	44,941.05	12/5/2023	36,124.56	36,135.65	12/5/2022	33,947.10	34,335.73
12/3/2024	44,705.53	44,769.58	12/4/2023	36,204.44	36,089.38	12/2/2022	34,429.88	34,265.45
12/2/2024	44,782.00	44,925.86	12/1/2023	36,245.50	35,914.45	12/1/2022	34,395.01	34,533.59
11/29/2024	44,910.65	44,760.05	11/30/2023	35,950.89	35,596.57	11/30/2022	34,589.77	33,795.43
11/27/2024	44,722.06	44,837.75	11/29/2023	35,430.42	35,436.80	11/29/2022	33,852.53	33,847.80
11/26/2024	44,860.31	44,614.89	11/28/2023	35,416.98	35,332.13	11/28/2022	33,849.46	34,275.91
11/25/2024	44,736.57	44,385.49	11/27/2023	35,333.47	35,376.44	11/25/2022	34,347.03	34,213.04
11/22/2024	44,296.51	43,871.63	11/24/2023	35,390.15	35,299.90	11/23/2022	34,194.06	34,091.57
11/21/2024	43,870.35	43,538.70	11/22/2023	35,273.03	35,189.33	11/22/2022	34,098.10	33,810.05
11/20/2024	43,408.47	43,296.05	11/21/2023	35,088.29	35,104.84	11/21/2022	33,700.28	33,760.30

Date	Close	Open	Date	Close	Open	Date	Close	Open
11/19/2024	43,268.94	43,243.27	11/20/2023	35,151.04	34,932.49	11/18/2022	33,745.69	33,606.59
11/18/2024	43,389.60	43,431.89	11/17/2023	34,947.28	34,964.82	11/17/2022	33,546.32	33,329.27
11/15/2024	43,444.99	43,587.93	11/16/2023	34,945.47	34,868.03	11/16/2022	33,553.83	33,554.93
11/14/2024	43,750.86	44,032.38	11/15/2023	34,991.21	34,906.72	11/15/2022	33,592.92	33,755.94
11/13/2024	43,958.19	43,880.46	11/14/2023	34,827.70	34,581.20	11/14/2022	33,536.70	33,662.05
11/12/2024	43,910.98	44,359.21	11/13/2023	34,337.87	34,259.25	11/11/2022	33,747.86	33,797.75
11/11/2024	44,293.13	44,057.65	11/10/2023	34,283.10	34,020.82	11/10/2022	33,715.37	33,263.91
11/8/2024	43,988.99	43,768.53	11/9/2023	33,891.94	34,163.71	11/9/2022	32,513.94	33,004.47
11/7/2024	43,729.34	43,718.92	11/8/2023	34,112.27	34,185.92	11/8/2022	33,160.83	32,934.56
11/6/2024	43,729.93	42,850.40	11/7/2023	34,152.60	34,075.65	11/7/2022	32,827.00	32,454.10
11/5/2024	42,221.88	41,835.49	11/6/2023	34,095.86	34,092.61	11/4/2022	32,403.22	32,265.01
11/4/2024	41,794.60	42,004.66	11/3/2023	34,061.32	33,988.83	11/3/2022	32,001.25	31,985.05
11/1/2024	42,052.19	41,869.82	11/2/2023	33,839.08	33,457.82	11/2/2022	32,147.76	32,576.28
10/31/2024	41,763.46	41,956.34	11/1/2023	33,274.58	33,081.87	11/1/2022	32,653.20	32,862.79
10/30/2024	42,141.54	42,249.81	10/31/2023	33,052.87	33,029.11	10/31/2022	32,732.95	32,754.27
10/29/2024	42,233.05	42,323.48	10/30/2023	32,928.96	32,537.54	10/28/2022	32,861.80	32,204.31
10/28/2024	42,387.57	42,264.54	10/27/2023	32,417.59	32,782.40	10/27/2022	32,033.28	32,062.14
10/25/2024	42,114.40	42,477.51	10/26/2023	32,784.30	33,017.17	10/26/2022	31,839.11	31,738.44
10/24/2024	42,374.36	42,522.55	10/25/2023	33,035.93	33,203.53	10/25/2022	31,836.74	31,463.65
10/23/2024	42,514.95	42,834.40	10/24/2023	33,141.38	33,089.64	10/24/2022	31,499.62	31,187.32
10/22/2024	42,924.89	42,876.84	10/23/2023	32,936.41	32,993.02	10/21/2022	31,082.56	30,291.18

Source: https://finance.yahoo.com/ (accessed 21st October 2025)