

# QUANTITATIVE TRADING ANALYST<sup>+</sup>

## CORRELATION BETWEEN BITCOIN AND S&P 500

Presented by MUFIN



# WHAT IS BITCOIN (BTC)...?

Bitcoin is a form of digital currency that operates in a decentralized manner, using blockchain technology to record all transactions. Created in 2009 by a person or group of people with the pseudonym Satoshi Nakamoto.

Decentralization, cryptographic security, and limited supply (only 21 million Bitcoins will ever exist). As a digital asset, Bitcoin has become a very important topic in the world of global finance, offering the potential for security and investment growth.



# WHAT IS S&P500 (SPX)...?

The S&P 500 is a stock market index that includes the 500 largest companies in the United States stock market. This provides a good picture of the performance of the US equity market as a whole.

The S&P 500 is often used as a measure of overall US stock market performance and is one of the indicators frequently monitored in economic and financial analysis.



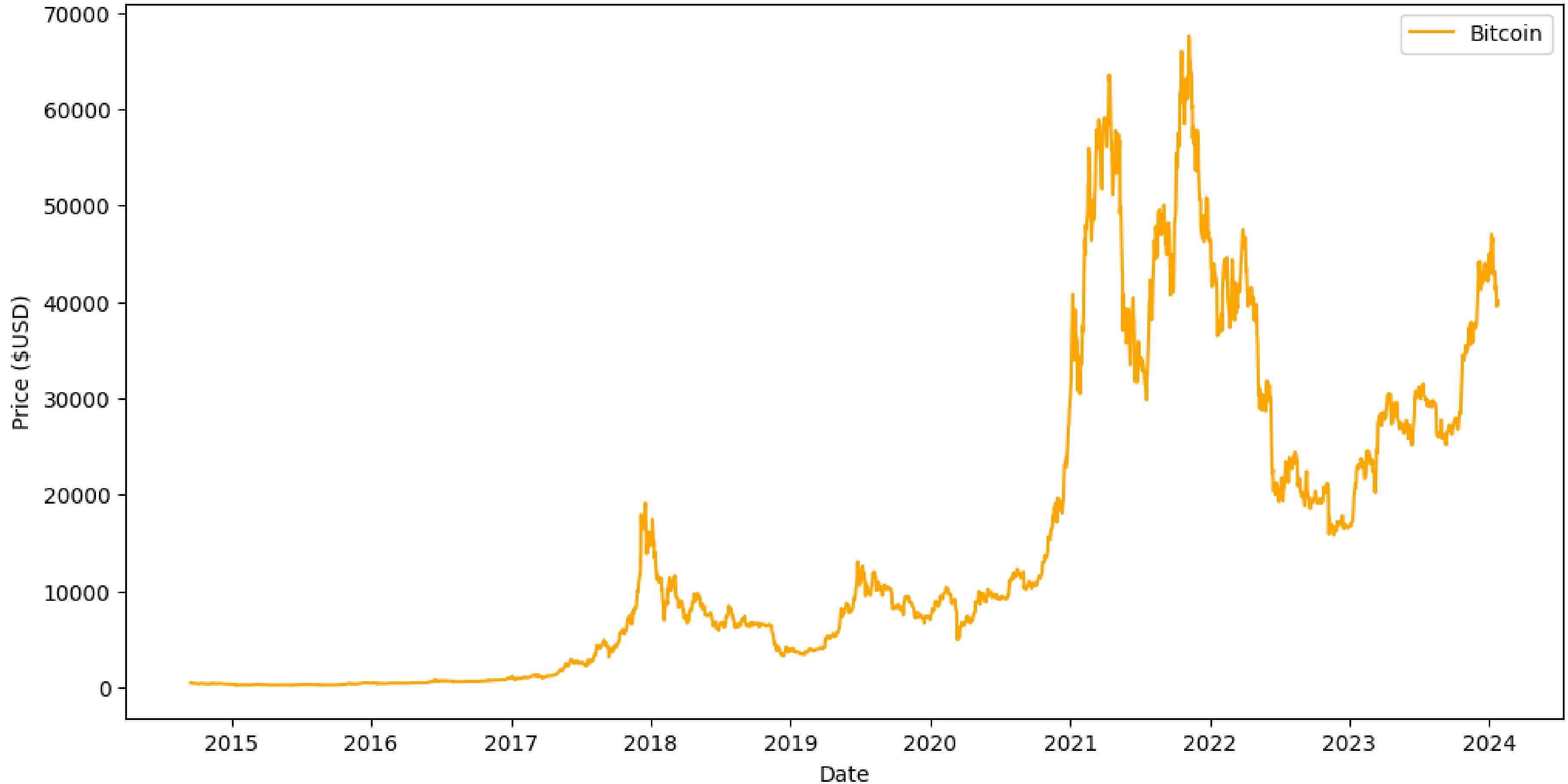
# HISTORY OF BITCOIN PRICE

At the moment, the price of bitcoin is experiencing a decline after peaking in November 2021. This decline is caused by several factors, including rising interest rates in the United States, concerns about a global recession, and increasing regulation of cryptocurrencies.

Overall, the bitcoin price chart shows that this digital currency has significant growth potential. However, investors should be aware of the high volatility risks associated with cryptocurrencies.



# BitCoin Graph



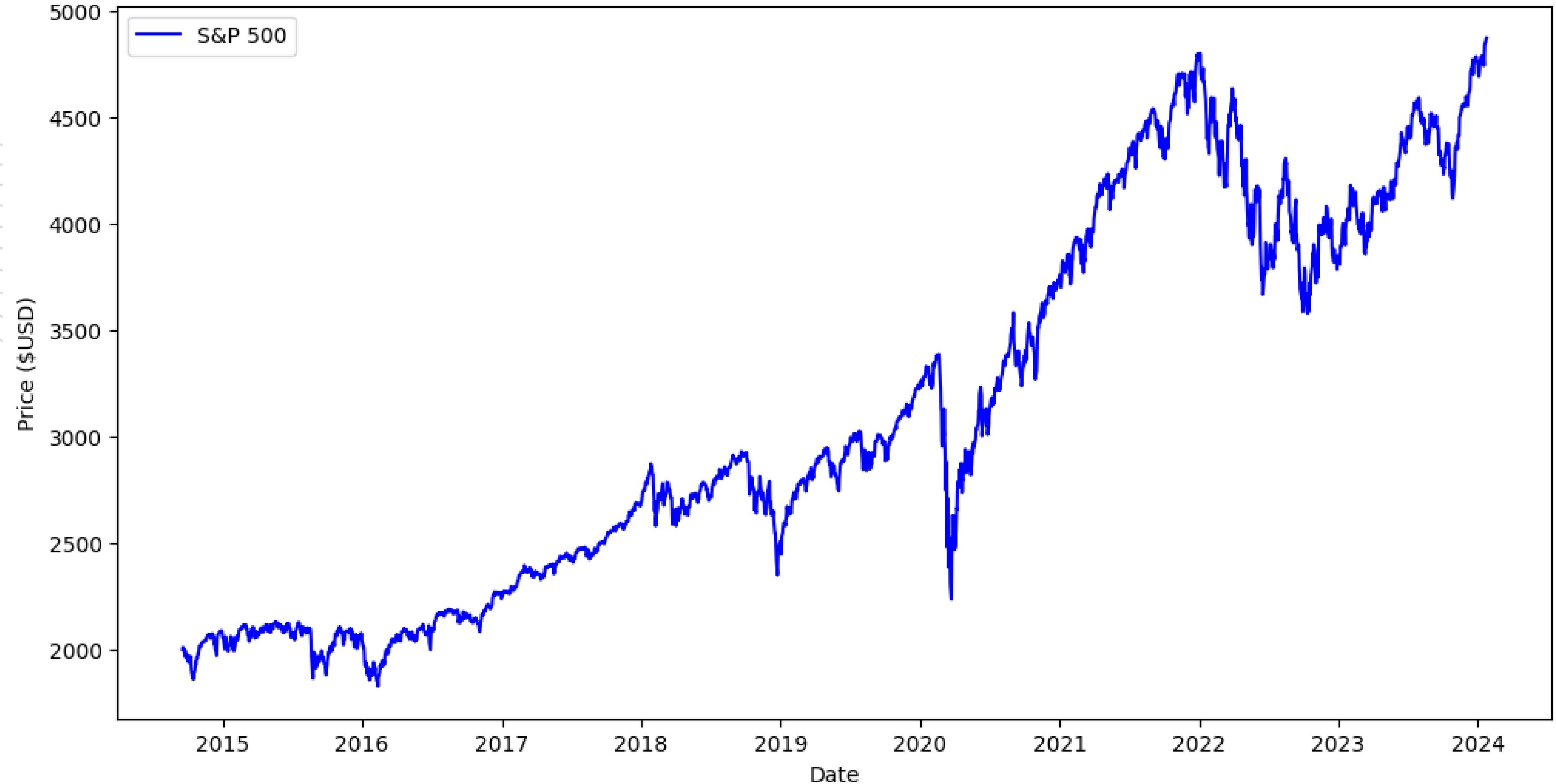
# HISTORY OF S&P 500

The S&P 500 chart from 2014 to the present shows an upward trend. In 2014, the index peaked at 2,053.24. Since then, the index has risen consistently, and on January 30, 2024, the index was at 4891.

At this time, the S&P 500 index is at its highest level since 2022. It is still too early to say whether this index will continue to rise or will start to bounce back. However, investors should be aware that the risk of a significant increase in the S&P 500 index carries a similar risk of a decrease.



## S&P 500 Graph



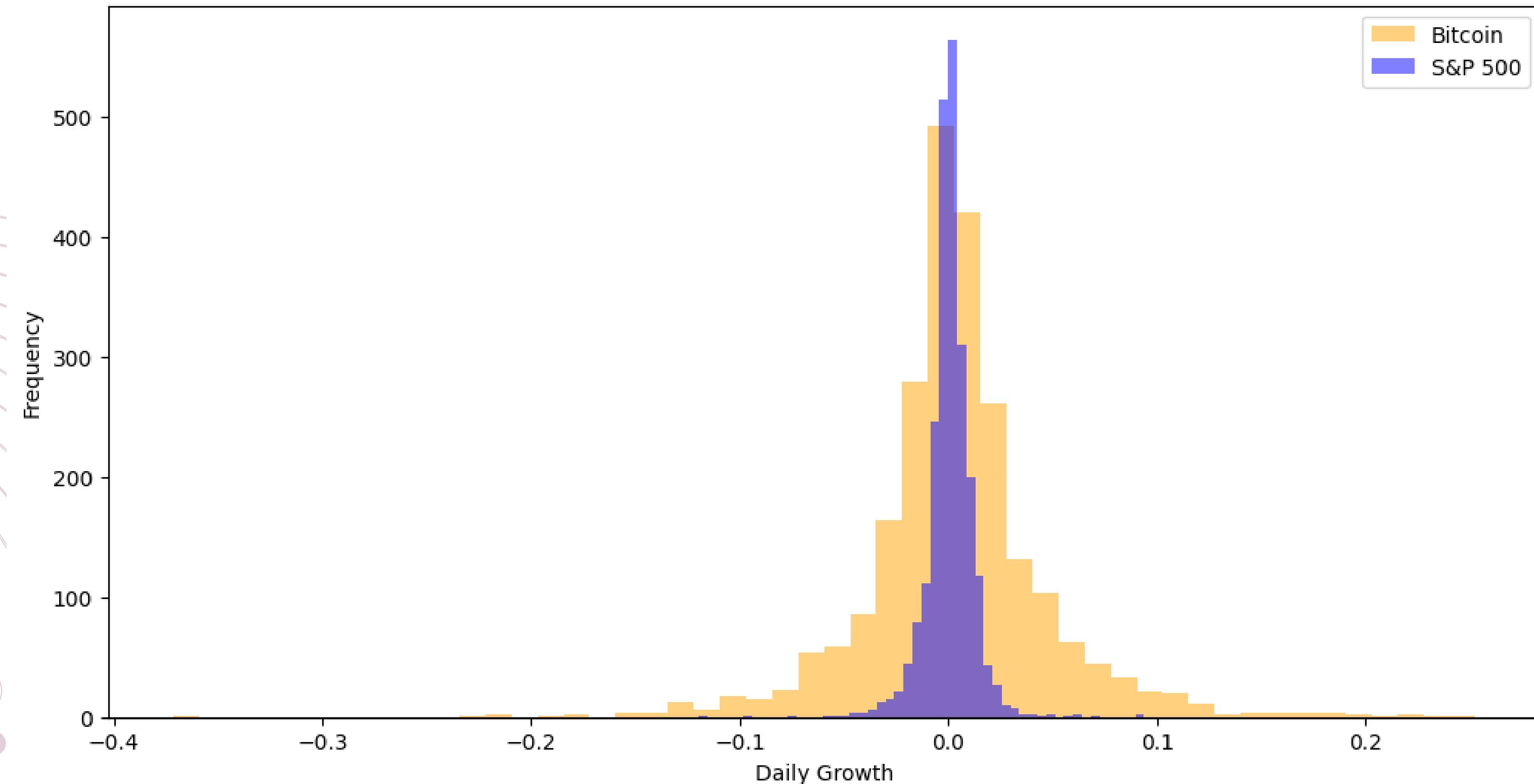
# CORRELATION BETWEEN BITCOIN AND S&P 500

Correlation is a statistical measure that measures how closely two variables move together. If the correlation is close to 1, it indicates a positive relationship; if it is close to -1, it indicates a negative relationship. A value of 0 indicates no correlation.

With a correlation value of 0.90 between Bitcoin and the S&P 500, we can conclude that the two have a strong positive relationship. This means that Bitcoin and S&P 500 price movements tend to move simultaneously in the same direction.



## Daily Growth Histogram



```
1 correlation = merged_data['Close_Bitcoin'].corr(merged_data['Close_SP500'])  
2 print(f"Correlation between Bitcoin and S&P 500: {correlation}")
```



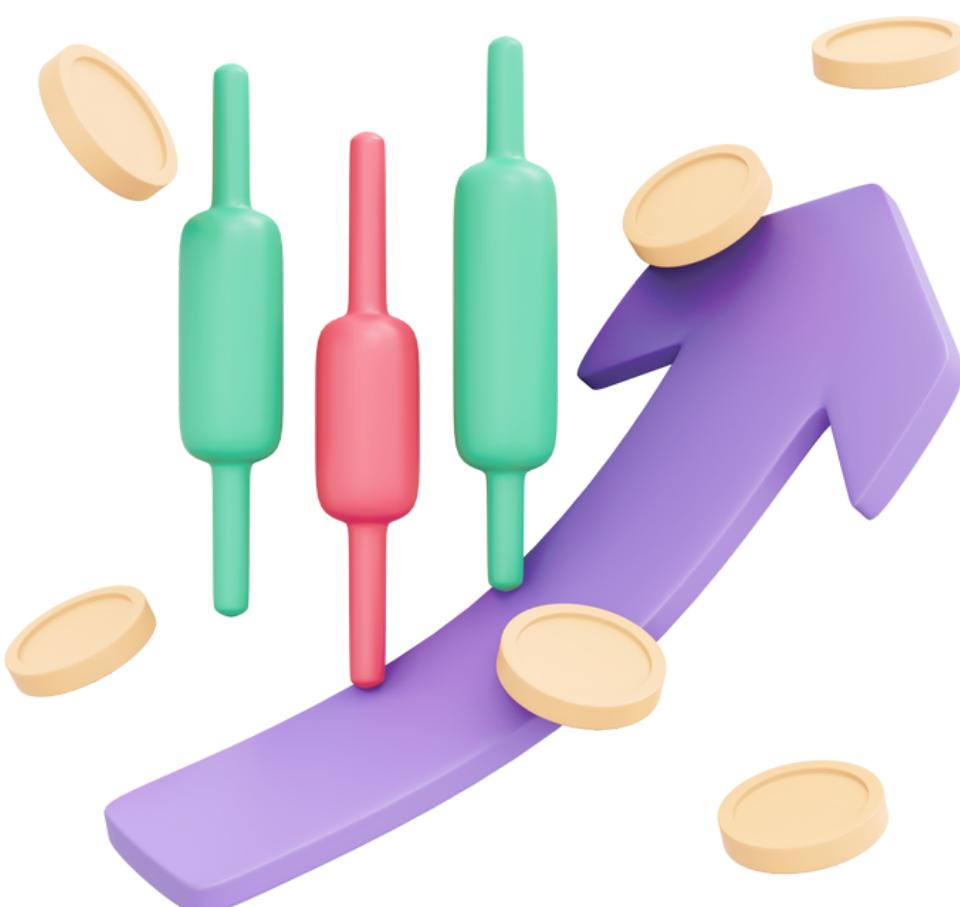
Correlation between Bitcoin and S&P 500: 0.9006110903611818

# FACTORS AND IMPLICATIONS



While the two have a positive correlation, it is important to understand the factors that can influence this relationship, such as market events, investor sentiment, or changes in regulations.

This correlation analysis has important implications for investors. Understanding the relationship between Bitcoin and the S&P 500 can help in managing risk and making more informed investment decisions.



# MARKET OVERVIEW

## CORRELATION GAP: BITCOIN VS S&P 500

Even though previously we saw a strong correlation, now there is a significant gap. Bitcoin price experienced a decline from 48,600 to 38,800, while the S&P 500 continued to increase and even set a new all-time high.

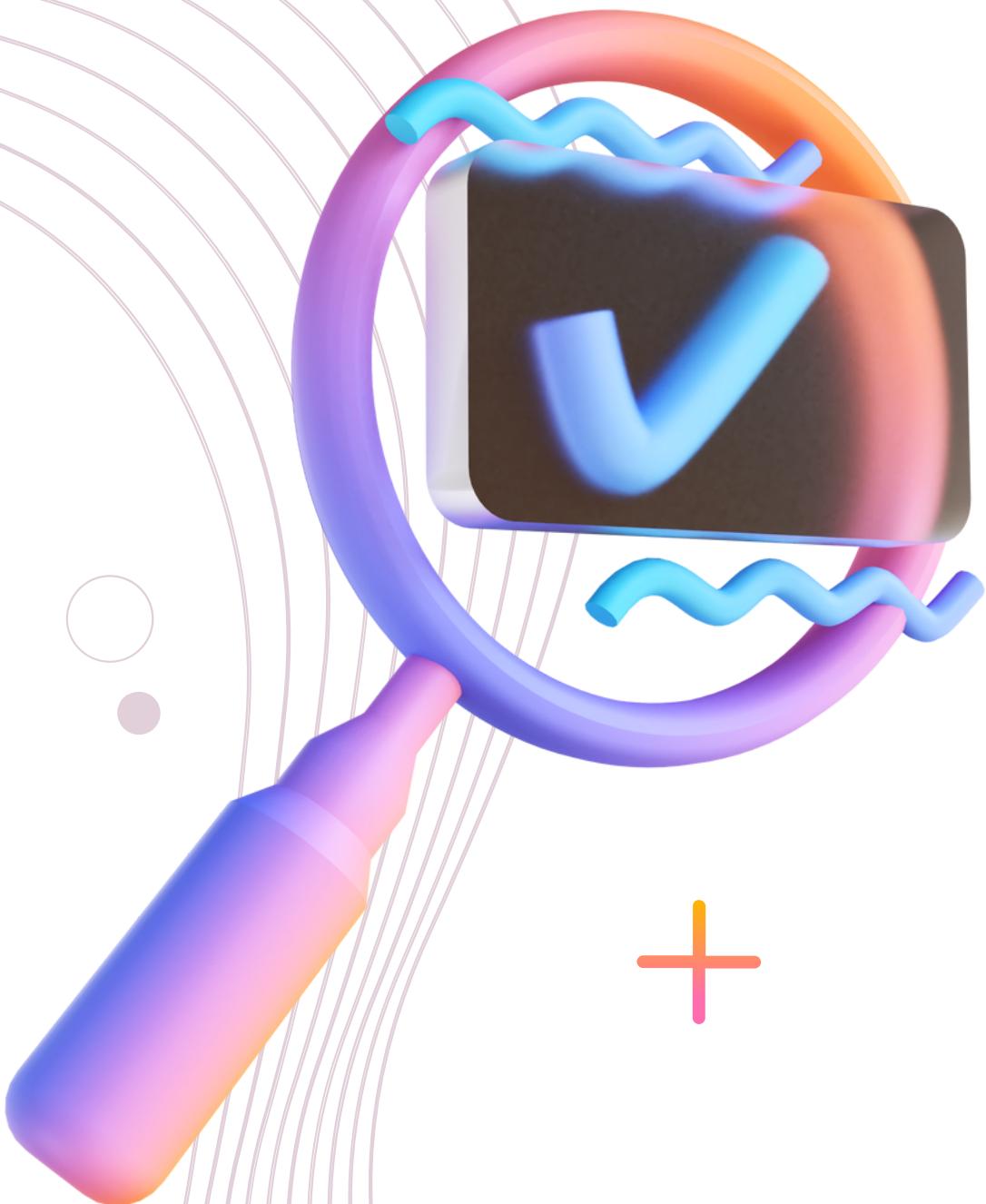
## CHALLENGES AND OPPORTUNITIES

This gap creates challenges and opportunities for investors. While Bitcoin's decline could be an opportunity to buy at lower prices, the S&P 500's growth raises questions about optimal portfolio allocation.

## EXTERNAL FACTORS AND RECOMMENDATIONS

It should be noted that external events such as macroeconomic or geopolitical news can also influence this correlation gap. In facing this gap, it is important to consider portfolio diversification, understand risk, and involve the latest information in making investment decisions.

# WHY YOU SHOULD DO INVESTMENT?



Bitcoin, in recent years, has increasingly been seen as a 'store of value' or a tool for preserving wealth rather than simply seeking quick profits. Although known for its volatility, many believe that Bitcoin's long-term growth potential makes it an option as an asset that can store value.

Some people equate Bitcoin with digital gold. Like gold, Bitcoin is considered a form of investment that is resistant to inflation and currency value fluctuations. Whether you view Bitcoin as a tool for preserving wealth or not, it is important to continue doing research, discussing with financial professionals, and ensuring that your investment decisions align with your personal financial goals.



# THANK YOU FOR LISTENING!

To make money they didn't have and didn't need, they risked what they did have and did need.