



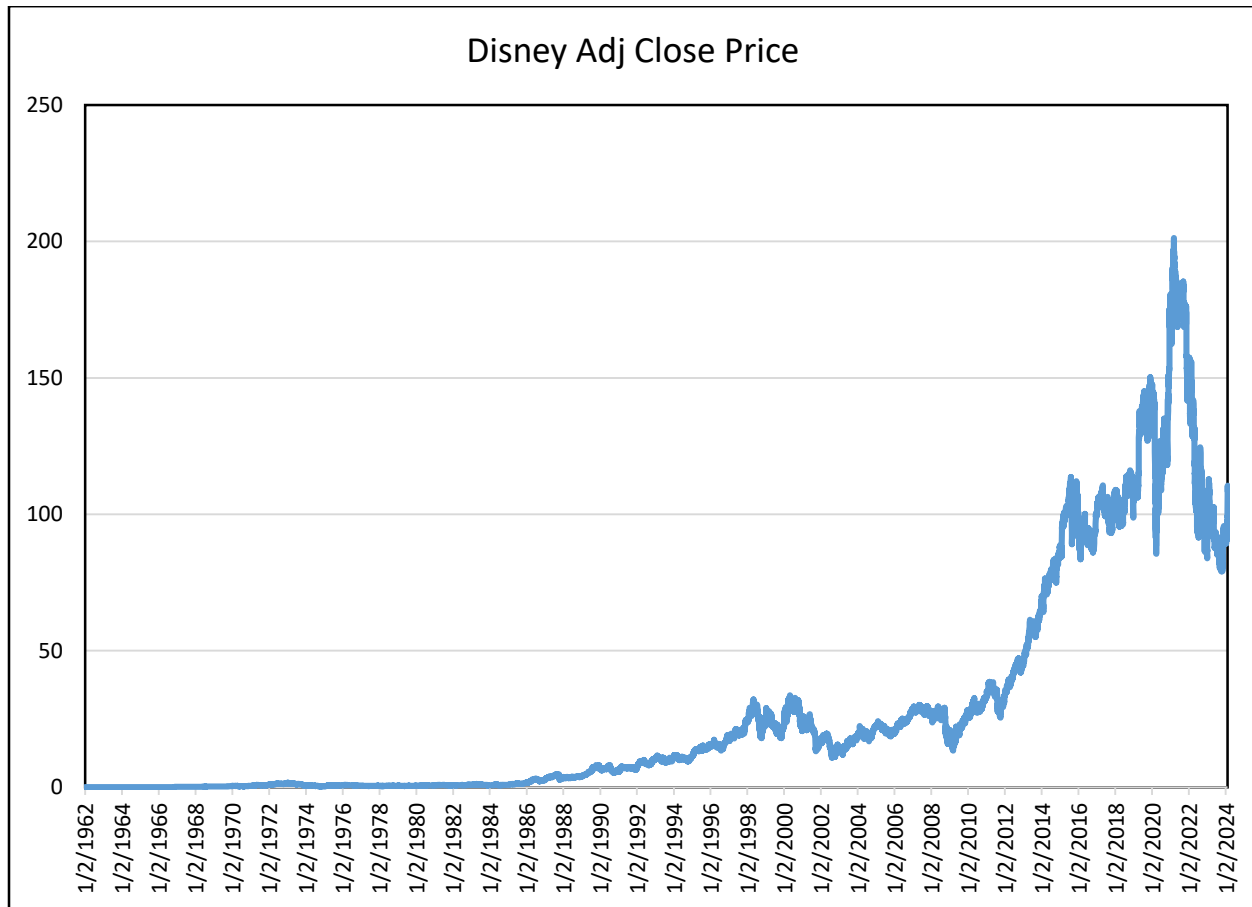
# **DISNEY INVESTMENT OVERVIEW**

By Tin Hang

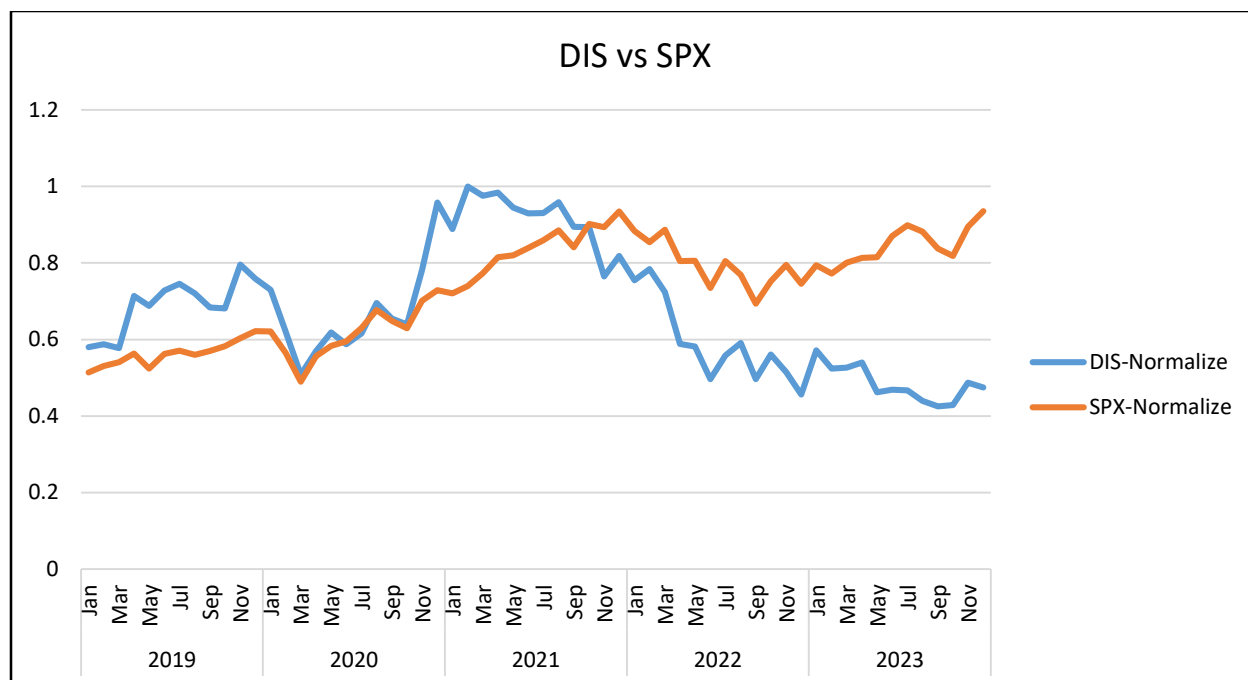
March 4, 2024

## Executive Summary:

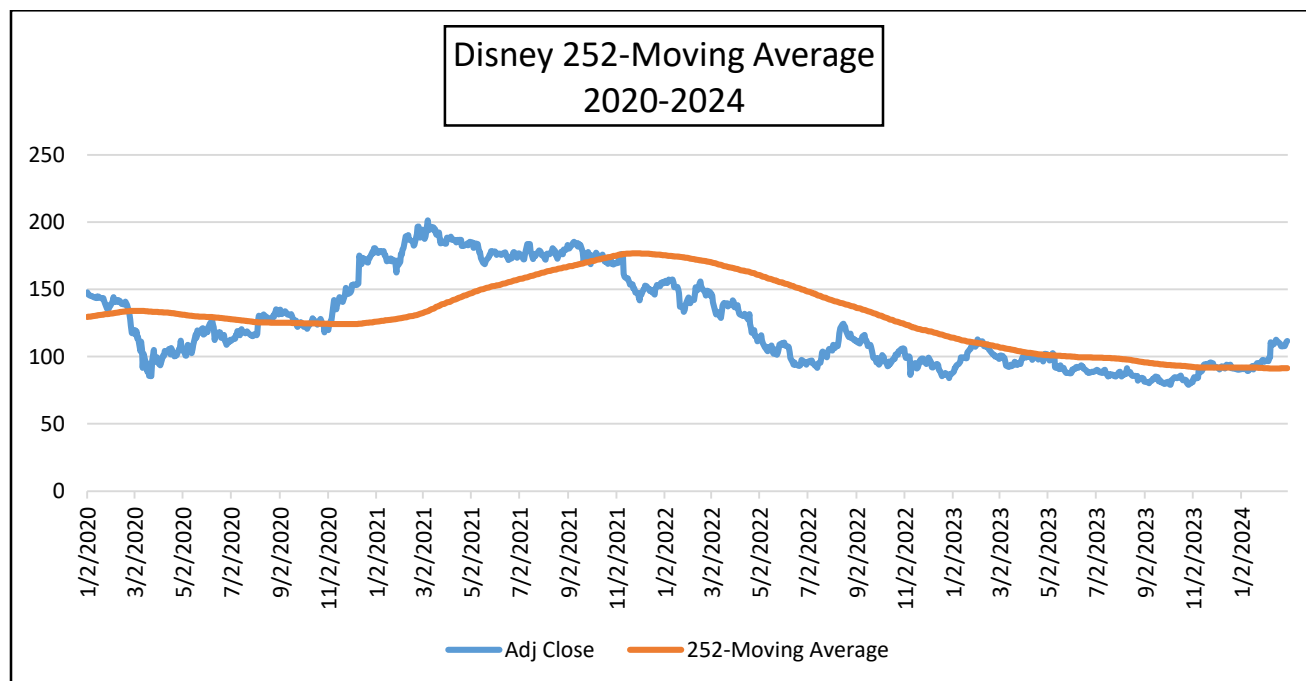
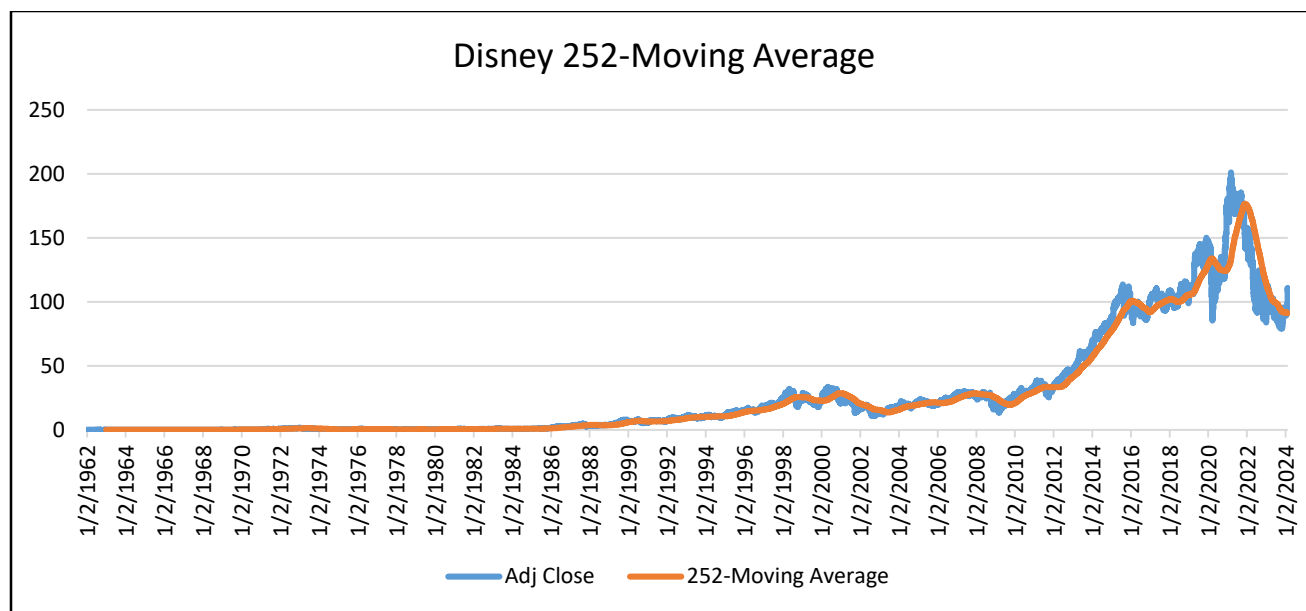
Established on October 16, 1923, by Walt Disney and Roy O. Disney, The Walt Disney Company, commonly known as Disney, embarked on its journey as the Disney Brothers Cartoon Studio. Over nearly a century, Disney has transformed from a humble animation studio into a multimedia powerhouse. Going public with its initial public offering (IPO) on November 12, 1957, Disney issued 155,000 shares at \$13.88 per share, marking a significant milestone in its evolution into a global entertainment conglomerate synonymous with magic, creativity, and innovation.



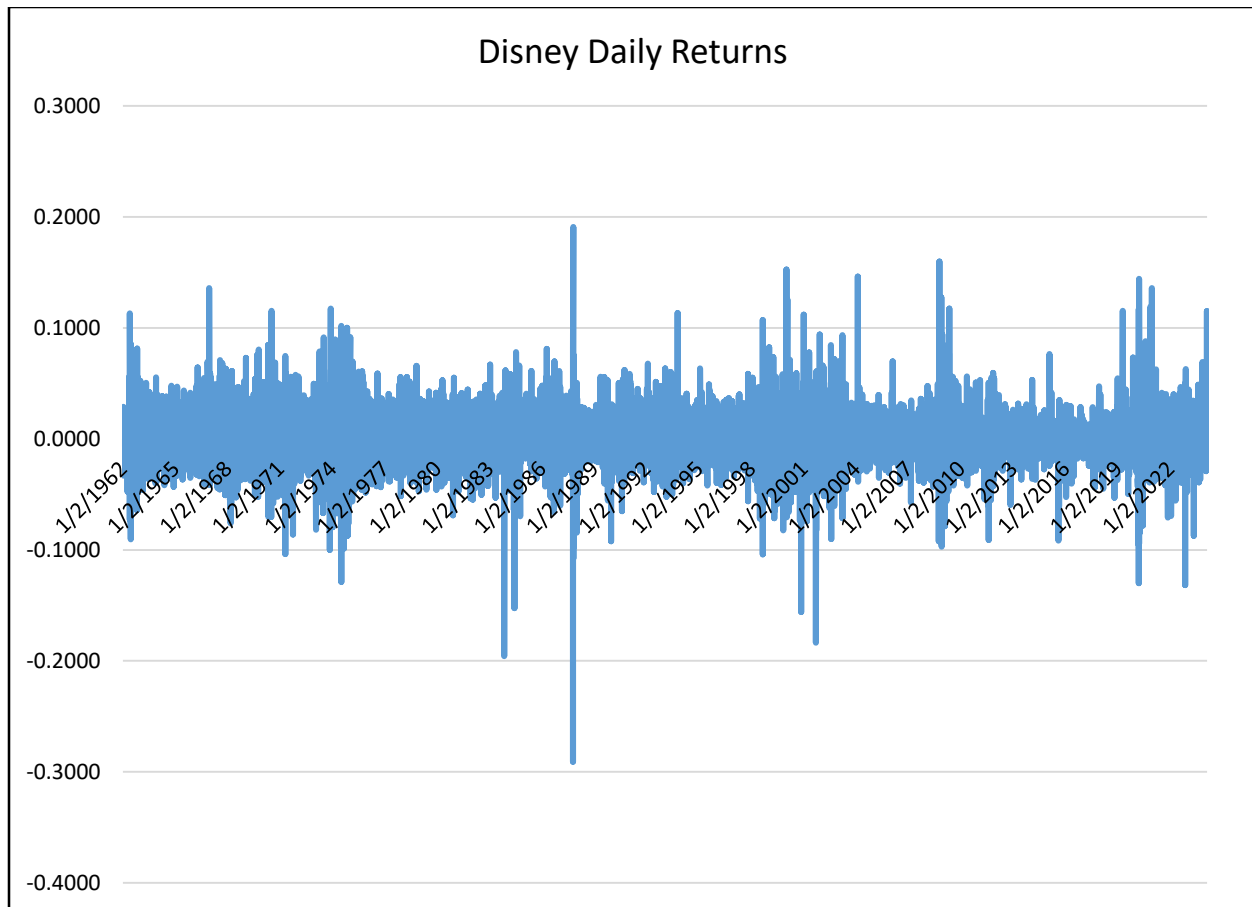
The price of Disney stock was \$0.05 on January 2, 1962, and it has since increased to \$108.38 as of February 9, 2024. This monumental rise in value over the span of more than six decades highlights the remarkable growth and success of the company. Disney's evolution from a modestly priced stock to one valued over a hundred dollars underscores its enduring relevance and sustained performance in the market. This trajectory signifies the company's ability to adapt, innovate, and capitalize on various opportunities across industries such as entertainment, media, and leisure. Additionally, it reflects investors' confidence in Disney's leadership, brand strength, and strategic vision. The consistent upward trend in its stock price illustrates the resilience and longevity of Disney as a cornerstone of the global economy and a beloved cultural icon.



DIS and SPX, spanning from January 2019 to December 2023, showcase varying performance trends. If DIS's value exceeds that of SPX, it indicates that Disney outperformed the S&P 500 index in terms of returns for that month, and vice versa. In January 2019, DIS exhibited higher returns compared to SPX, signifying Disney's superior performance relative to the S&P 500 index during that month. Throughout January 2019 to December 2019, there were fluctuations in the relative performance of DIS and SPX. DIS recorded notably higher returns in some months, while SPX outperformed in others. In 2023, the performance of both DIS and SPX continued to fluctuate. DIS occasionally outperformed SPX, particularly in March and April, whereas SPX consistently outperformed DIS in September and October. December 2023 witnessed both DIS and SPX experiencing a significant percentage change compared to the previous months. Overall, while DIS often outperformed SPX in certain months, the S&P 500 Index generally demonstrated more stable performance over the analyzed period. DIS, being a single stock, is subject to company-specific factors, while SPX represents a broader market index. Investors seeking stability might prefer the diversified exposure provided by the S&P 500, while those aiming for potentially higher returns might consider investing in individual stocks like DIS, albeit with higher risk.



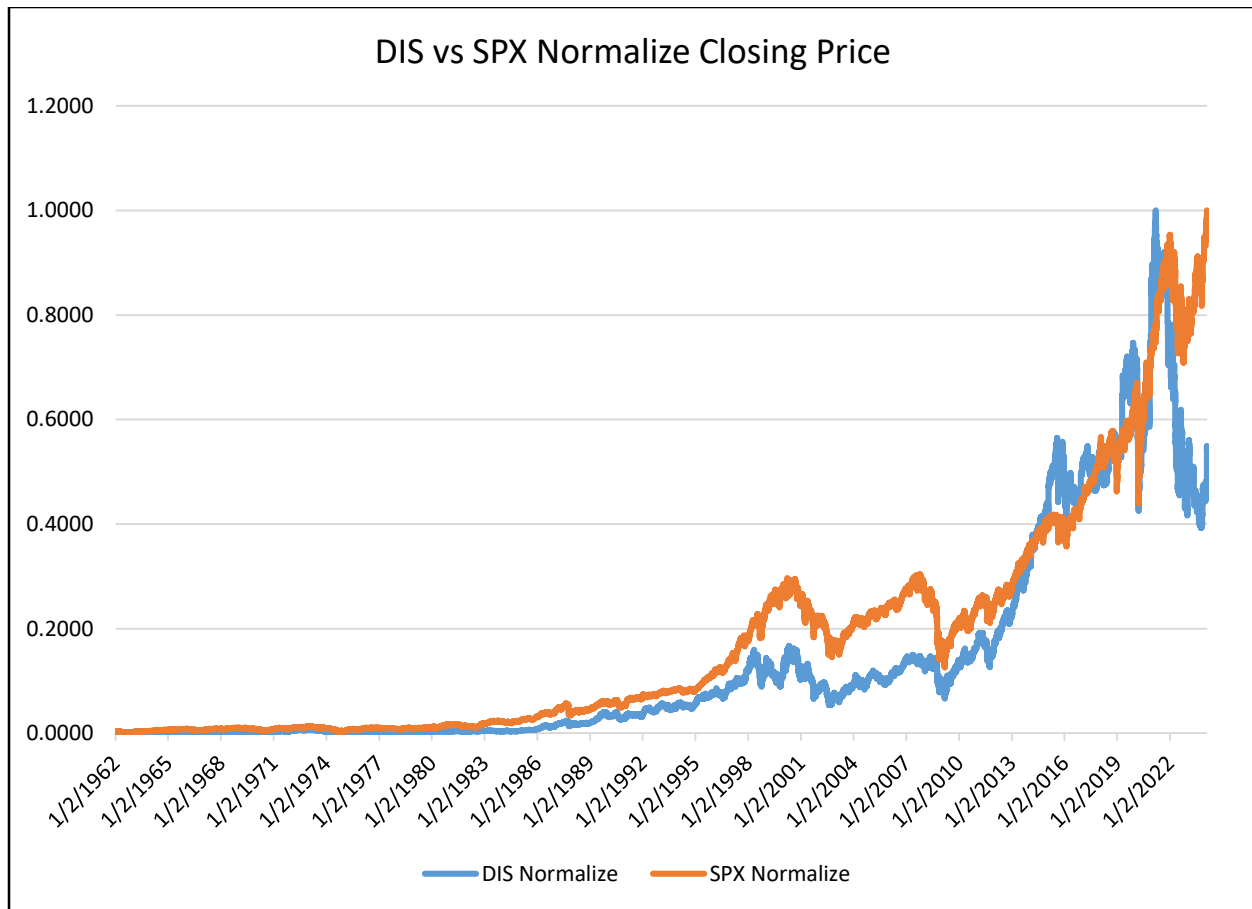
The closing price of Disney is currently above its 252-day moving average. A moving average is a widely used technical analysis tool that helps smooth out price data by creating a constantly updated average price. The 252-day moving average is a common choice for long-term analysis in financial markets, as it roughly corresponds to the number of trading days in a year. When the closing price of a stock, such as Disney in this case, is above its 252-day moving average, it can suggest a bullish trend or positive momentum in the stock's price over the long term. This indicates that, on average, the price of Disney has been trending higher over the past 252 trading days. Traders and investors often pay close attention to such movements as they can provide insights into the overall direction of the stock's price and potential trading opportunities.



These statistics provide insights into the distribution and behavior of daily returns for DIS. The average return indicates the typical daily performance, while the maximum and minimum returns show the extremes of the distribution. Quartiles divide the data into four segments, with Quartile 1 representing the lower 25% of returns and Quartile 3 representing the upper 25%. The median return is the middle value, indicating the central tendency of the data. Skewness measures the asymmetry of the distribution, with negative skewness indicating a left-skewed distribution. Kurtosis measures the tailedness of the distribution, with a higher value suggesting heavier tails compared to a normal distribution.

### **Comparative Analysis:**

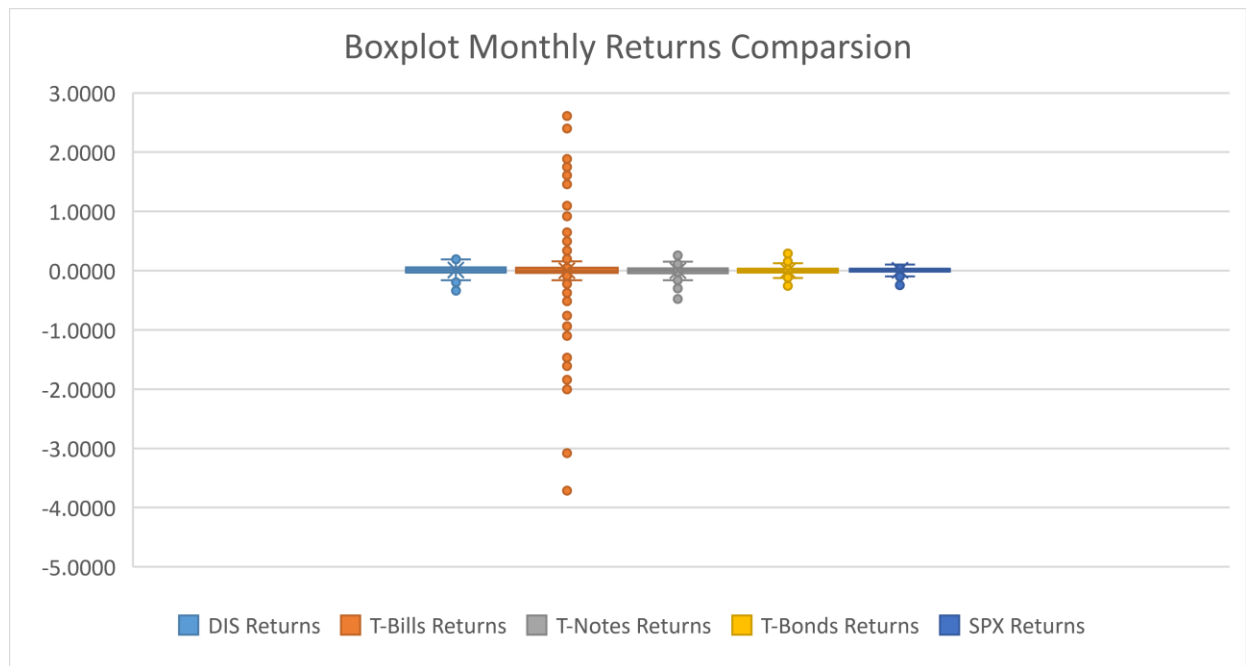
Investing in the Disney company on January 2, 1962, proved to be a lucrative decision as Disney outperformed the market by a notable margin of 0.0002. This exceptional performance indicates that Disney demonstrated resilience and potentially superior strategic positioning compared to other market entities during that period. Such outperformance underscores the significance of thorough research and analysis when considering investment opportunities, as historical data can reveal valuable insights into the performance of companies and their potential for growth. In the case of Disney, this historic achievement serves as a testament to the enduring strength and enduring appeal of the company's brand and business model, making it an intriguing prospect for investors seeking long-term value and growth in their portfolios.



**Correlation:** The correlation coefficient between DIS and SPX is 0.9359. This high positive correlation indicates a strong linear relationship between the two variables. When one moves in a certain direction, the other tends to move in the same direction as well, albeit not necessarily by the same magnitude.

**Variance:** The variance of -0.0078 suggests that there is some degree of negative variation between DIS and SPX. However, since variance is a measure of how much values in a dataset deviate from the mean, a negative value here may imply that the values are consistently close to the mean, rather than widely spread apart.

**Covariance:** The covariance of 0.0417 indicates a positive relationship between DIS and SPX, but it is a less straightforward measure compared to correlation. Covariance signifies the degree to which two variables change together. A positive covariance suggests that when one variable increases, the other tends to increase as well, and vice versa. However, the magnitude of covariance alone does not give a clear indication of the strength of the relationship between the two variables, as it depends on the units of the variables.

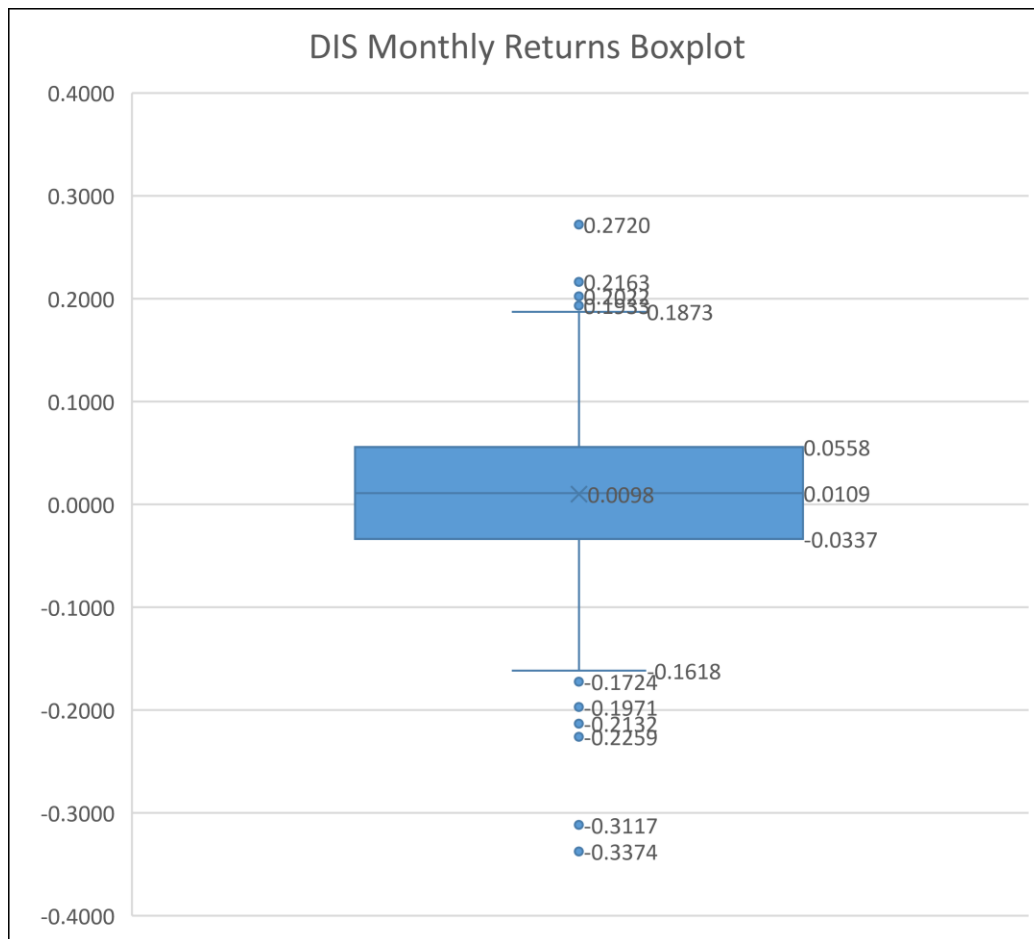


Among DIS, T-Notes, T-Bonds, and SPX, the least outliers are observed. Conversely, T-Bills exhibit the highest number of outliers. T-Bills offer a fixed rate of interest, ensuring a stable income. Nevertheless, when interest rates rise, existing T-Bills become less desirable as their rates become less competitive compared to the broader market.

Analyzing both datasets, the mean returns for DIS are slightly higher than those for SPX, indicating potentially better performance. However, when considering median values, SPX returns are slightly higher, suggesting a more stable central value. Modes for both datasets are less significant due to the variability of returns.

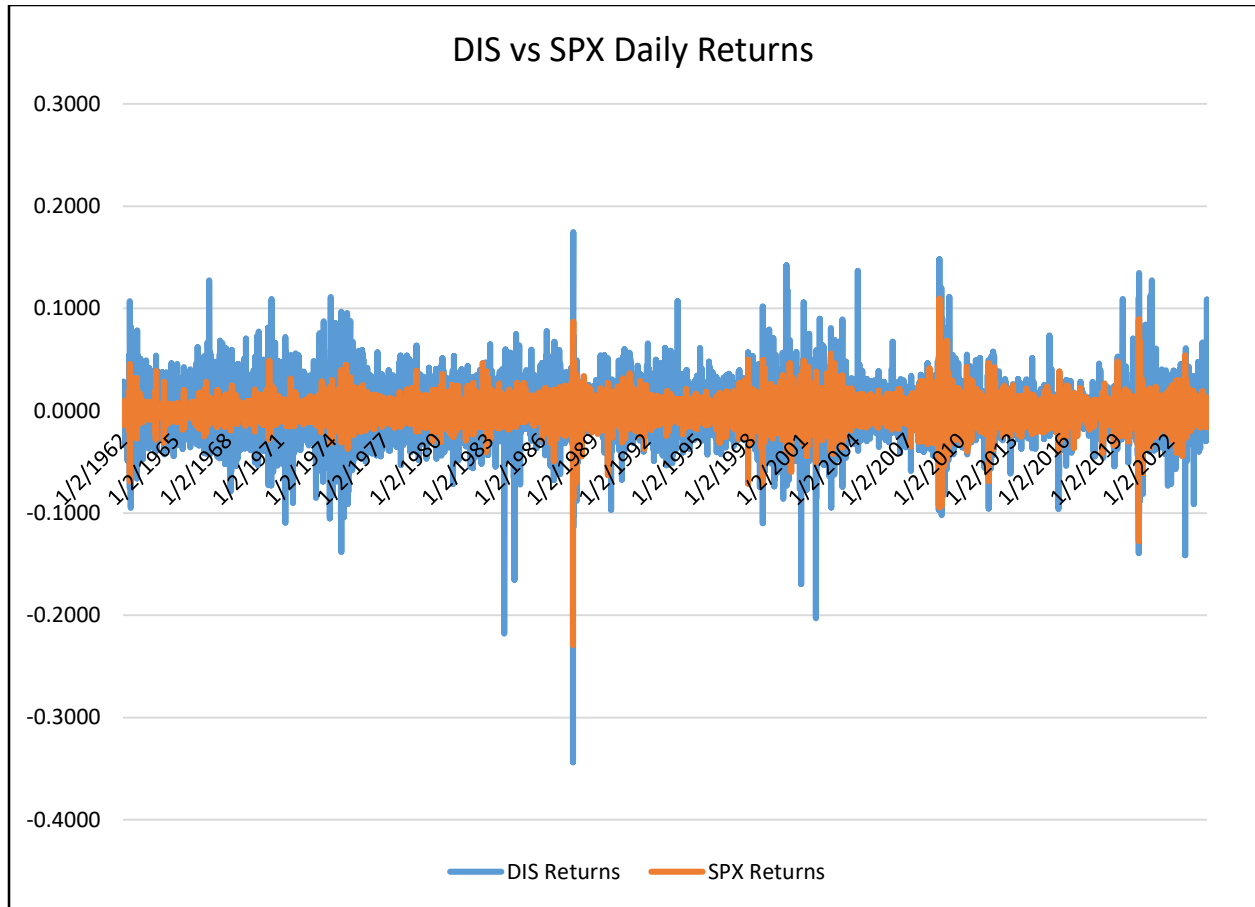
The quartile analysis reveals differences in the distribution of returns. While both datasets exhibit a range of returns, DIS returns seem to have a wider spread, with some extreme outliers, whereas SPX returns appear more evenly distributed around the median.

In summary, while DIS shows higher mean returns, SPX exhibits more stable median returns. Additionally, the distribution of DIS returns appears to be more spread out compared to SPX returns. These insights can guide investment decisions, with DIS potentially offering higher returns but also higher volatility, while SPX presents a more consistent performance.



1. **Average Returns:** This is the mean return on the investment over a certain period. In this case, it's 0.0098 or 0.98%.
2. **Max Returns:** The highest return observed in the dataset, which is 0.2720 or 27.20%.
3. **Min Returns:** The lowest return observed in the dataset, which is -0.3374 or -33.74%.
4. **Quartile 1:** Also known as the first quartile or 25th percentile, this represents the value below which 25% of the data falls. In this case, it's -0.0335 or -3.35%.
5. **Median Returns:** The middle value of the dataset when arranged in ascending order. In this case, it's 0.0109 or 1.09%.
6. **Quartile 3:** Also known as the third quartile or 75th percentile, this represents the value below which 75% of the data falls. In this case, it's 0.0557 or 5.57%.
7. **Skew Returns:** Skewness measures the asymmetry of the distribution of returns. A negative skew indicates that the left tail of the distribution is longer or fatter than the right tail. In this case, it's -0.3740.
8. **Kurtosis Returns:** Kurtosis measures the tailedness of the return distribution. A higher kurtosis indicates heavier tails compared to a normal distribution. In this case, it's 1.6083.





	DIS	SPX
Average Returns	0.0005	0.0003
Standard Deviation	0.0199	0.0104
Max Returns	0.1748	0.1096
Min Returns	-0.3438	-0.2290
Quartile 1	-0.0097	-0.0043
Median Returns	0.0000	0.0004
Quartile 3	0.0103	0.0052
Skew Returns	-0.3837	-0.9860
Kurtosis Returns	12.2854	24.9099

This table provides various statistical measures for two investments, labeled as DIS and SPX. Here's what each row represents:

1. **Average Returns:** This row shows the average return for each investment. For DIS, the average return is 0.0005, and for SPX, it is 0.0003.

2. **Standard Deviation:** The standard deviation indicates the dispersion or variability of returns around the mean. For DIS, the standard deviation is 0.0199, and for SPX, it is 0.0104.
3. **Max Returns:** This indicates the maximum return observed for each investment. For DIS, it is 0.1748, and for SPX, it is 0.1096.
4. **Min Returns:** This shows the minimum return observed for each investment. For DIS, it is -0.3438, and for SPX, it is -0.2290.
5. **Quartile 1:** This represents the value below which 25% of the data falls. For DIS, Quartile 1 is -0.0097, and for SPX, it is -0.0043.
6. **Median Returns:** This is the middle value of the dataset when arranged in ascending order. For DIS, it is 0.0000, and for SPX, it is 0.0004.
7. **Quartile 3:** This represents the value below which 75% of the data falls. For DIS, Quartile 3 is 0.0103, and for SPX, it is 0.0052.
8. **Skew Returns:** Skewness measures the asymmetry of the distribution of returns. A negative skew indicates that the left tail of the distribution is longer than the right tail. For DIS, skewness is -0.3837, and for SPX, it is -0.9860.
9. **Kurtosis Returns:** Kurtosis measures the "tailedness" of the return distribution. High kurtosis indicates heavy tails, which means more outliers. For DIS, kurtosis is 12.2854, and for SPX, it is 24.9099.

These statistics provide insight into the distribution, central tendency, and shape of returns for each investment, aiding investors in assessing risk and potential returns.

### **Income Statement Analysis:**

The income statement, known as the profit and loss statement, encapsulates a company's financial performance, detailing its revenues, expenses, and profits within a defined timeframe, typically quarterly or annually. It serves as a crucial tool for investors to gauge a company's profitability and operational efficiency.

Total revenue represents the overall income generated by a company from its core business activities within a specific period. In 2019, the total revenue for the company amounted to \$69.57 billion, which saw a slight decrease in 2020 to \$65.39 billion before rebounding to \$67.42 billion in 2021. The most significant surge occurred in 2022, reaching \$82.72 billion, followed by another substantial increase to \$88.90 billion in 2023. Over the trailing twelve months (TTM), revenue continued to rise, reaching \$88.94 billion. Gross profit reflects the difference between revenue and the cost of goods sold, indicating the efficiency of a company's operations. Despite fluctuations in revenue, gross profit followed a similar pattern, reaching \$27.55 billion in 2019, dropping to \$21.51 billion in 2020, and gradually climbing to \$30.53 billion in the TTM period. Operating income (EBIT) portrays the profitability of a company's core business operations, excluding interest and taxes. Over the years, the company faced operating losses, with 2019 showing -\$15.70 billion, gradually worsening to -\$21.55 billion in 2022 before slightly improving to -\$20.70 billion in 2023 and -\$20.60 billion in the TTM period. Net income available to common stockholders represents the ultimate profit after all expenses, including taxes and interest, have

been deducted. The company experienced fluctuations in net income, including a notable loss in 2020, -\$2.86 billion, but managed to recover and maintain positive earnings, reaching \$2.98 billion in the TTM period, showcasing resilience despite operational challenges.

Let's delve into the income statement analysis for Disney spanning from 2019 through the trailing twelve months (TTM) ending in the provided data:

1. Total Revenue:
  - 2019: \$69,570,000,000
  - 2020: \$65,388,000,000
  - 2021: \$67,418,000,000
  - 2022: \$82,722,000,000
  - 2023: \$88,898,000,000
  - TTM: \$88,935,000,000
2. Gross Profit:
  - 2019: \$27,552,000,000
  - 2020: \$21,508,000,000
  - 2021: \$22,287,000,000
  - 2022: \$28,321,000,000
  - 2023: \$29,697,000,000
  - TTM: \$30,533,000,000
3. Operating Income/Expenses (EBIT):
  - 2019: -\$15,701,000,000
  - 2020: -\$17,714,000,000
  - 2021: -\$18,628,000,000
  - 2022: -\$21,551,000,000
  - 2023: -\$20,705,000,000
  - TTM: -\$20,598,000,000
4. Net Income Available to Common Stockholders:
  - 2019: \$11,054,000,000
  - 2020: -\$2,864,000,000
  - 2021: \$1,995,000,000
  - 2022: \$3,145,000,000
  - 2023: \$2,354,000,000
  - TTM: \$2,986,000,000

Overall, the income statement highlights Disney's financial trajectory, showcasing fluctuations in revenue, expenses, and profitability over the specified period. Investors can utilize these insights to make informed decisions regarding their investment strategies.

## **Balance Sheet Analysis:**

The balance sheet serves as a crucial tool for investors, offering a snapshot of a company's financial health at a specific point in time. In this report, we analyze The Walt Disney Company's balance sheet from 2019 to 2023, focusing on its assets, liabilities, and shareholders' equity.

**Total Assets:** This represents the total value of assets owned by Disney. It shows an increasing trend over the years from 2019 to 2023, indicating growth in the company's asset base.

**Total Current Assets:** These are assets expected to be converted into cash or used up within one year. This category includes items like cash, accounts receivable, and inventory. The values fluctuate but generally show an increasing trend, implying a growth in short-term assets.

**Total Liabilities:** This represents the company's total debts and obligations. It shows a fluctuating trend over the years but generally decreases from 2020 to 2023, indicating a reduction in liabilities.

**Total Current Liabilities:** These are obligations expected to be settled within one year. The values fluctuate but show a relatively stable trend overall, with a slight increase towards 2023.

**Total Equity:** Equity represents the ownership interest in the company. It increases steadily over the years, indicating growth in shareholders' equity.

**Equity Attributable to Parent Stockholders:** This is the portion of equity owned by the parent company's stockholders. It shows a generally increasing trend, reflecting growth in ownership interest.

a. **Paid-in Capital:** This is the amount of capital contributed by investors in exchange for shares. It shows a steady increase over the years, indicating additional investments made by shareholders.

b. **Retained Earnings/Accumulated Deficit:** This represents the accumulated profits or losses retained by the company rather than distributed as dividends. It increases over the years, indicating the company's profitability and reinvestment of earnings.

c. **Reserves/Accumulated Comprehensive Income/Losses:** This reflects changes in comprehensive income, including gains and losses not recognized in the income statement. The values fluctuate but show a decreasing trend towards 2023.

**Non-Controlling/Minority Interests in Equity:** This represents the portion of equity attributable to minority shareholders in subsidiaries. It shows a fluctuating trend but remains relatively stable over the years.

Overall, the balance statement provides a comprehensive view of Disney's financial position, indicating growth in assets, equity, and retained earnings, along with fluctuations in liabilities and other equity components.

### **Cash Flow Statement Analysis:**

The Cash Flow Statement is a critical financial document that meticulously tracks the inflow and outflow of cash within an organization over a specific period. It is segmented into three primary sections: Operating Activities, Investing Activities, and Financing Activities. This report delves into the Cash Flow Statement of The Walt Disney Company, analyzing its performance from 2019 to the trailing twelve months (TTM).

**Net Cash Flow from Continuing Operating Activities, Indirect:** This represents the net cash flow generated from the company's core business operations, calculated indirectly. It's essential because it shows how much cash the company is generating from its primary activities. The numbers seem to fluctuate, but there's a notable increase from 2022 to the TTM. This indicates improvement.

**Income/Loss before Non-Cash Adjustment:** This figure represents the income or loss before considering non-cash adjustments, providing insight into the company's profitability excluding non-cash items. It shows a negative value in 2020 but turns positive in subsequent years. This suggests an improvement in profitability.

**Total Adjustments for Non-Cash Items:** This reflects the total adjustments made to reconcile net income to net cash provided by operating activities, representing non-cash expenses or income. The numbers vary, but there's a significant increase from 2021 to the TTM, indicating a larger impact of non-cash items on cash flow.

**Changes in Operating Capital:** This shows changes in the operating capital, which includes items like accounts receivable, inventory, and accounts payable. It's generally negative, indicating a decrease in operating capital, but the magnitude decreases over the years, suggesting potential efficiency improvements.

**Dividend Received, CFO Indirect:** This represents the cash received from dividends as part of operating activities. It remains relatively stable over the years.

**Issuance of/Repayments for Debt, Net:** This reflects the net cash flow from the issuance or repayment of debt. The numbers fluctuate but show a decreasing trend from 2021 to the TTM, which could indicate the company is managing its debt more efficiently.

**Proceeds from Issuance/Exercising of Stock Options/Warrants:** This represents cash received from the issuance or exercise of stock options or warrants. It fluctuates but doesn't show a clear trend.

**Other Financing Cash Flow:** This represents cash flows from financing activities other than debt or equity issuance. It fluctuates but doesn't show a clear trend.

**Cash Dividends and Interest Paid:** This is not provided for all years, but it's crucial as it shows how much cash the company is paying out in dividends and interest. It's missing for some years, so it's hard to assess the trend.

Overall, the cash flow statement indicates improvements in net cash flow from operating activities and profitability, along with some fluctuations in financing activities. However, it's essential to consider other financial metrics and industry context for a comprehensive analysis.

### **Investment Recommendation:**

Based on our analysis of Disney's financial statements, we maintain a bullish outlook on the stock. The company's consistent revenue growth, strong balance sheet, and healthy cash flow generation position it well for future expansion and shareholder value creation. We recommend investors consider adding Disney to their portfolios for long-term growth potential.

The Sharpe Ratio is a measure used to evaluate the risk-adjusted returns of an investment strategy or portfolio. It is calculated by subtracting the risk-free rate of return from the average return of the investment and then dividing the result by the standard deviation of the investment's returns. In the given paragraph, the Sharpe Ratios for two investments, represented by the symbols DIS and SPX, are provided. A negative Sharpe Ratio indicates that the investment is generating lower returns compared to the risk-free rate, adjusted for its level of risk. Additionally, the paragraph mentions the Sharpe Ratios for a trading strategy involving these investments, indicating that the trading strategy is yielding even lower risk-adjusted returns, as both ratios are negative and more pronouncedly so compared to the investments themselves.

Return on Investment (ROI) measures the profitability of an investment relative to its initial cost. In this context, for the DIS (Disney) stock, the ROI stands at an impressive 186108.32%, indicating that for every dollar invested initially, the return is over 1861 times the initial investment. For the SPX (S&P 500 index), the ROI is 6983.72%, which is still substantial but lower compared to Disney.

Compound Annual Growth Rate (CAGR), on the other hand, provides a smoothed annual growth rate over a specified period, accounting for the effect of compounding. For Disney, the CAGR is exceptionally high at 4215.19%, suggesting that over the given period, Disney's stock value has been growing at an average annual rate of over 4215%. In contrast, the S&P 500 index has a significantly lower CAGR of 741.65%, implying a slower but still positive average annual growth rate over the same period.

**Risk Factors:**

While Disney Company exhibits strong financial metrics, investors should be mindful of potential risks, including intense competition in the technology sector, regulatory changes, and macroeconomic uncertainties. Moreover, any disruptions to supply chains or adverse market conditions could impact the company's performance and stock price.

**Final Analysis:**

The Disney Company has been in existence since 1923, which means it has been around for over 100 years. Additionally, Disney has been publicly traded since 1962, marking 62 years in the public market. Disney has demonstrated higher returns than the SPX; however, it also exhibits a higher standard deviation. Despite this higher volatility, Disney remains a good long-term investment, outperforming the SPX. This conclusion is drawn from Disney's consistent outperformance relative to the SPX, despite its higher volatility. Investors seeking long-term growth and returns may find Disney's performance appealing, as it has consistently outperformed the broader market over time.

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