February 2024

Student of the Market



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| Stocks | | Bonds, cash and inflation | Alternatives | | |
|---|-----------------------------------|---|---|--|--|
| January stock market returns | Growth vs. value | Inflation-adjusted returns | Alternatives and bear markets | | |
| Stock market volatility and elections | U.S. stocks outperforming cash | Bonds following a Federal Reserve pause | Student of alternatives: Private equity | | |

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So goes January...?

| rage return following Ja Since 19 | nuary (next 11 months) ⁹²⁶ | | January return | Return for rest o year (11 months) |
|--------------------------------------|--|------|-------------------|--|
| | | 2024 | 1.7% | ? |
| | | 2023 | 6.3% | 18.8% |
| | | 2022 | -5.2% | -13.6% |
| 12.7% | | 2021 | -1.0% | 30.0% |
| | | 2020 | -0.0% | 18.5% |
| In presidential | | 2019 | 8.0% | 21.7% |
| election years | | 2018 | 5.7% | -9.6% |
| when January has been positive, | | 2017 | 1.9% | 19.6% |
| every year finished | 7.6% | 2016 | -5.0% | 17.8% |
| higher (11 for 11) | | 2015 | -3.05 | 4.5% |
| finishing up on | | 2014 | -3.5% | 17.8% |
| average 15.6% the | | 2013 | 5.2% | 25.9% |
| next 11 months | | 2012 | 4.5% | 11.0% |
| | | 2011 | 2.4% | -0.3% |
| | | 2010 | -3.6% | 19.4% |
| POSITIVE January | NEGATIVE January | 2009 | -8.4% | 38.1% |

Source: Morningstar as of 1/31/24. U.S. stocks are represented by the S&P 500 Index from 3/4/57 to 1/31/24 and the IA SBBI U.S. Lrg Stock Tr USD Index from 1/1/26 to 3/4/57, unmanaged indexes that are generally considered representative of the U.S. stock market during each given time period. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Stock volatility by presidential election year

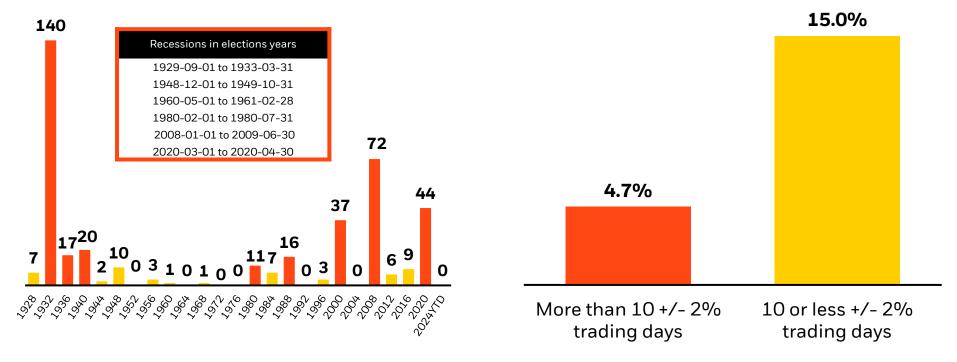
Stock market volatility during elections has been generally subdued unless there is a large recession (such as in '32, '08 & '20)

Number of single day stock market returns of +/-2% or more - presidential election years

S&P 500, past 20+ years by calendar year (1/1/01 - 12/31/23)

Average stock market return based on the number of +/- 2% trading days- election years

Since 2001, returns are based on calendar years

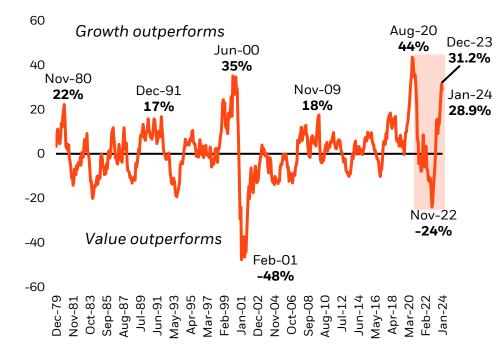


Source: Morningstar as of 1/31/24. Stock market represented by the S&P 500 Index from 3/4/57 and the S&P 500 PR Index from 1/1/28 to 3/4/57. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Large swings between growth and value outperformance over the last couple of years

1-year outperformance, growth vs value

Large growth performance minus large value performance, since 1979 (%)



Growth vs. value after periods of large growth outperformance

Large growth performance minus large value performance, since 1979 (%)

| Largest growth outperformances | Growth outperformance | 1 year later (Growth - Value) | | |
|--------------------------------|--------------------------|----------------------------------|--|--|
| Aug-2020 | 43.5% | -7.9% | | |
| Jun-2000 | 34.6% | -46.5% | | |
| Dec-2023 | 31.2% | ? | | |
| Nov-1980 | 22.2% | -14.2% | | |
| Nov-2009 | 17.5% | +5.1% | | |
| Dec-1991 | 16.7% | -8.6% | | |

Source: Morningstar as of 1/31/24. Large growth stocks are represented by the Russell 1000 Growth Index and large value stocks represented by the Russell 1000 Value Index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You can not invest directly in the index.

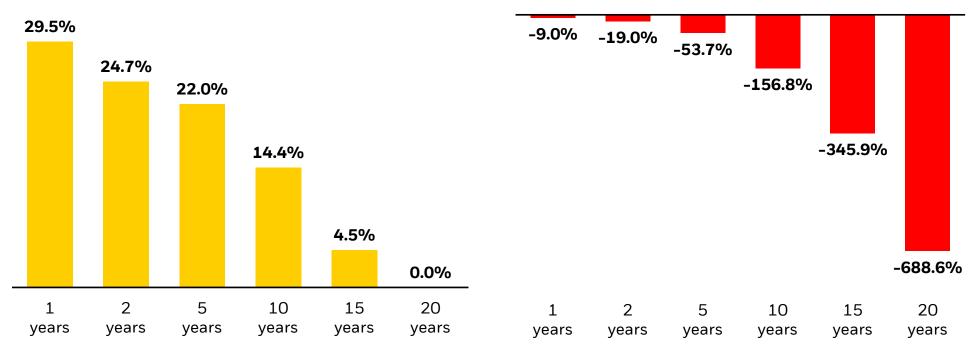
Stocks outperforming cash

Odds of cash outperforming U.S. stocks

1926-2023

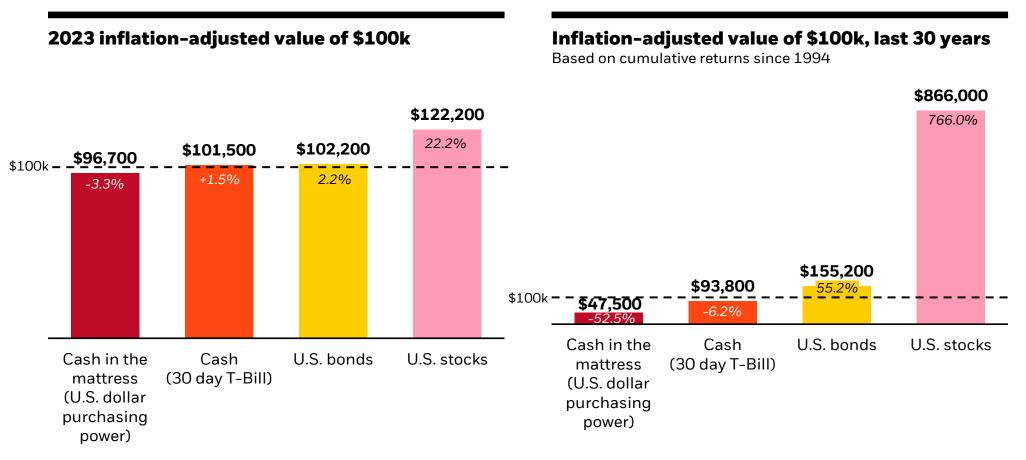
Average underperformance of cash vs. U.S. stocks

cumulative returns 1926-2023



Morningstar as of 12/31/23. Cash represented by the IA SBBI US 30 day TBill Index, U.S. stocks represented by the IA SBBI US large stock index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Moving beyond cash: Inflation-adjusted returns



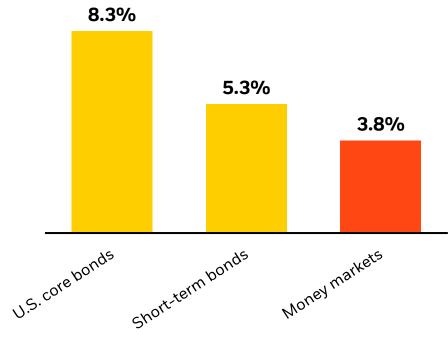
Source: Morningstar and St. Louis Federal Reserve, as of 12/31/23. Cash in the mattress represented by the Consumer Price Index for All Urban Consumers: Purchasing Power of the Consumer Dollar in U.S. City Average, cash is represented by the IA SBBI 30 day treasury bill index, U.S. bonds represented by the Bloomberg U.S. aggregate bond index for the 1 year period and the IA SBBI US IT govt bond inflation adj index. For the 30 year period. **Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only**. You cannot invest directly in the index.

Bonds performance six months after the last Fed interest rate hike

The Federal Reserve raising rates for the last time in a cycle and bond performance

Average 1-year return beginning 6 months after the last Fed hike

2/4/94 - 12/31/23



Specific periods of performance beginning 6 months after the last Fed hike

2/4/94 - 12/31/23

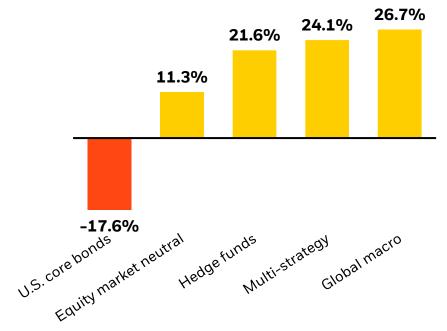
| Last Federal Reserve rate increase | Performance period | U.S. core bonds | Short-term bonds | Money markets |
|--|-----------------------|--------------------|---------------------|------------------|
| 2/1/95 | 8/1/95- 7/30/96 | 5.5 | 5.0 | 5.1 |
| 5/16/00 | 11/16/00- 11/15/01 | 12.3 | 9.2 | 4.3 |
| 6/29/06 | 12/29/06- 12/28/07 | 6.6 | 4.2 | 4.7 |
| 12/20/18 | 6/20/19- 6/19/20 | 8.9 | 2.9 | 1.1 |
| 7/26/23 | 1/26/24- 1/25/25 | ? | ? | ? |
| Average | | 8.3 | 5.3 | 3.8 |

Source: Morningstar as of 12/31/23. U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR Index, short term bonds represented by the Morningstar active short term bond category average and money markets represented by the Morningstar money market taxable category average. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Alternatives tamed the recent bond and stock bear markets

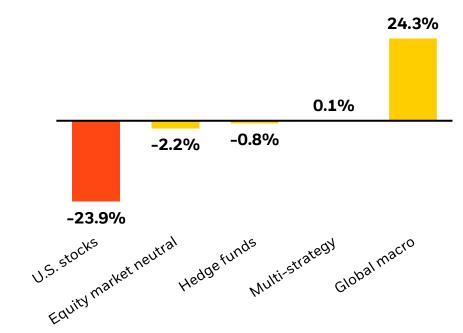
Bond bear market

Period between low and high in 10-year U.S. treasury yield, 8/4/20 to 10/19/23 cumulative returns



2022 U.S. stock bear market

Period between low and high in S&P 500, 1/1/22 to 10/14/22, cumulative returns



Source: Morningstar as of 1/31/24. U.S. bonds are represented by the Bloomberg U.S. Agg Bond TR Index, U.S. stocks represented by the S&P 500 index, equity market neutral represented by the Credit Suisse equity market neutral index, Hedge funds represented by the Credit Suisse hedge fund index, Multi- strategy represented by the Credit Suisse multi-strategy index and Global macro represented by the Credit Suisse global macro index. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You cannot invest directly in the index.

Student of alternatives: Private equity

U.S. stock and private equity (PE) calendar year returns (%)

(9/30/13 - 12/31/23)

| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 *as of 9/30 | Annual return 10 Yr |
|-----------------------------------|-----------------------------------|----------------------------------|--------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|------------------------------------|
| PE- Late stage vc & gr 24.0 | PE- Late stage vc & gr 14.6 | Small cap stocks 21.3 | PE- buyouts 23.2 | PE- Late stage vc & gr 19.2 | U.S. stocks 31.5 | PE- Late stage vc & gr 55.1 | PE- Late stage vc & gr 47.7 | PE- buyouts –1.4 | U.S. stocks 26.3 | PE- Late stage vc & gr 16.6^ |
| U.S. stocks 13.7 | All private eq 10.2 | PE- buyouts 12.5 | U.S. stocks 21.8 | All private eq 12.3 | Small cap stocks 25.5 | All private eq 33.7 | PE- secondaries 41.6 | PE- secondaries -3.5 | Small cap stocks 16.9 | All private eq 15.2 |
| All private eq 12.7 | PE- buyouts 9.3 | U.S. stocks 12.0 | All private eq 20.7 | PE- secondaries 10.1 | PE- Late stage vc & gr 19.3 | PE- buyouts 24.4 | All private eq 40.4 | All private eq -8.2 | PE- buyouts 5.3* | PE- buyouts 15.0^ |
| PE- secondaries 10.3 | PE- secondaries 8.3 | All private eq 9.0 | PE- secondaries 20.0 | PE- buyouts 9.2 | All private eq 17.8 | PE- secondaries 21.8 | PE- buyouts 37.5 | U.S. stocks -18.1 | PE- secondaries 2.5* | PE- secondaries 13.0^ |
| PE- buyouts 10.1 | U.S. stocks 1.4 | PE- secondaries 5.5 | PE- Late stage vc & gr eq 14.8 | U.S. stocks -4.4 | PE- buyouts 17.0 | Small cap stocks 20.0 | U.S. stocks 28.7 | PE- Late stage vc & gr -20.3 | All private eq 1.8 | U.S. stocks 12.0 |
| Small cap stocks 4.9 | Small cap stocks -4.4 | PE- Late stage vc & gr 1.4 | Small cap stocks 14.6 | Small cap stocks -11.0 | PE- secondaries 11.6 | U.S. stocks 18.4 | Small cap stocks 14.8 | Small cap stocks -20.4 | PE- Late stage vc & gr -2.5* | Small cap stocks 7.2 |

Source: Morningstar and The Burgiss Group LLC as of 12/31/23. U.S. stocks represented by the S&P 500 Index, Small cap stocks represented by the Russell 2000 Index, "Private equity represented by the Burgiss Private Equity Manager Universe (BMU) which contains 7,727 private equity funds (vintages 1978-2023) as of September 2023 with 9/30/23 performance data (most recent performance data available). All vintages were included. The buyouts sub-strategy contains 2,816 private equity funds (vintages 1978-2023) as of September 2023 with 9/30/2023. The secondaries sub-strategy contains 231 private equity funds (vintages 1978-2023) as of September 2023 with 9/30/2023. The secondaries sub-strategy contains 231 private equity funds (vintages 1978-2023) as of September 2023 with 9/30/2023. The Late Stage VC/Growth Equity sub-strategy includes VC and Expansion Capital categories and contains 3,874 private equity funds (vintages 1978-2023) as of September 2023 with 9/30/2013 to 9/30 2023. **Past performance does not guarantee or indicate future results.** Index performance is for illustrative purposes only. You cannot invest directly in the index.

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| Returns as of 1/31/24 | 1 Year Return | 5 Year Avg. Annual Return | 10 Year Avg. Annual Return |
|---|------------------|------------------------------|-------------------------------|
| Credit Suisse Equity Market Neutral USD | 6.73 | 3.55 | 1.63 |
| Credit Suisse Global Macro USD | -5.19 | 7.21 | 4.45 |
| Credit Suisse Hedge Fund USD | 5.83 | 6.12 | 3.86 |
| Credit Suisse Multi-Strategy USD | 8.04 | 5.80 | 4.89 |
| S&P 500 TR USD | 20.82 | 14.30 | 12.62 |
| S&P 500 PR USD | 18.86 | 12.37 | 10.52 |
| Bloomberg US Agg Bond TR USD | 2.10 | 0.83 | 1.63 |
| IA SBBI US 30 Day TBill Infl Adj TR USD | 2.43 | -2.11 | -1.49 |
| IA SBBI US 30 Day TBill TR USD | 5.07 | 1.84 | 1.23 |
| IA SBBI US IT Govt Infl Adj TR USD | 1.59 | -2.89 | -1.32 |
| IA SBBI US IT Govt TR USD | 4.22 | 1.03 | 1.40 |
| IA SBBI US Large Stock Infl Adj TR Ext | 17.78 | 9.85 | 9.62 |
| IA SBBI US Large Stock TR USD Ext | 20.82 | 14.30 | 12.62 |
| MSCI World NR USD | 16.99 | 11.39 | 9.14 |
| Russell 1000 Growth TR USD | 34.99 | 18.04 | 15.48 |
| Russell 1000 Value TR USD | 6.08 | 9.28 | 8.80 |
| Russell 2000 TR USD | 2.40 | 6.80 | 7.03 |
| US Active Fund Short-Term Bond | 4.83 | 1.84 | 1.59 |
| US BLS CPI All Urban SA 1982-1984 | 3.30 | 4.09 | 2.78 |
| US Fund Money Market - Taxable | 4.81 | 1.66 | 1.05 |
| Burgiss All private equity index as of 9/30/23 | 0.74 | 15.66 | 15.20 |
| Burgiss Secondaries Index as of 9/30/23 | 3.87 | 15.83 | 12.3 |
| Burgiss Buyout Index as of 9/30/23 | 9.29 | 17.59 | 14.1 |
| Burgiss Late stage venture and growth Index 9/30/23 | -8.10 | 20.64 | 15.6 |

Index Definitions:

- The Credit Suisse Hedge Fund Index is compiled by Credit Suisse Hedge Index LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The index uses the Credit Suisse Hedge Fund Database, which tracks approximately 9,000 funds and consists only of funds with a minimum of US\$50 million under management, a 12-month track record, and audited financial statements. The index is calculated and rebalanced on a monthly basis, and reflects performance net of all hedge fund component performance fees and expenses
- The **Credit Suisse Equity Market Neutral Hedge Fund Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of equity market neutral funds. Equity market neutral funds typically take both long and short positions in stocks while seeking to reduce exposure to the systematic risk of the market (i.e., a beta of zero is desired). Equity market neutral funds typically seek to exploit investment opportunities unique to a specific group of stocks, while maintaining a neutral exposure to broad groups of stocks defined for example by sector, industry, market capitalization, country, or region. The index has a number of subsectors including statistical arbitrage, quantitative long/short, fundamental long/short and index arbitrage. Managers often apply leverage to enhance returns.
- The **Credit Suisse Global Macro Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of global macro funds. Global macro funds typically focus on identifying extreme price valuations and leverage is often applied on the anticipated price movements in equity, currency, interest rate and commodity markets. Managers typically employ a top-down global approach to concentrate on forecasting how political trends and global macroeconomic events affect the valuation of financial instruments. Profits can be made by correctly anticipating price movements in global markets and having the flexibility to use a broad investment mandate, with the ability to hold positions in practically any market with any instrument. These approaches may be systematic trend following models, or discretionary.

Student of the Market: February 2024

Index Definitions (cont.):

- The **Credit Suisse Multi-Strategy Index** is a subset of the Credit Suisse Hedge Fund Index that measures the aggregate performance of multi-strategy funds. Multistrategy funds typically are characterized by their ability to allocate capital based on perceived opportunities among several hedge fund strategies. Through the diversification of capital, managers seek to deliver consistently positive returns regardless of the directional movement in equity, interest rate or currency markets. The added diversification benefits may reduce the risk profile and help to smooth returns, reduce volatility and decrease asset-class and single-strategy risks. Strategies adopted in a multi-strategy fund may include, but are not limited to, convertible bond arbitrage, equity long/short, statistical arbitrage and merger arbitrage.
- The S&P 500 TR Index is an unmanaged index that is generally considered representative of the U.S. stock market on a total return basis. Included are the largest 500 stocks by market cap.
- The S&P 500 PR Index is an unmanaged index that is generally considered representative of the U.S. stock market on a price return basis. Included are the largest 500 stocks by market cap.
- The Bloomberg U.S. Agg Bond TR Index is an unmanaged index that is generally considered representative of the U.S. bond market on a total return basis.
- The IA SBBI US 30 Day TBill TR Index is an unmanaged index that is generally considered representative of the historical U.S. 30-Day Treasury Bill market on a total return basis.
- The IA SBBI US 30 Day TBill Infl Adj TR Index is an unmanaged index that is generally considered representative of the historical U.S. 30-Day Treasury Bill market on a total return basis, adjusted for inflation.
- The IA SBBI IT Govt TR Index is an unmanaged index that is generally considered representative of the historical U.S. bond market on a total return basis prior to the inception of the Bloomberg U.S. Agg Bond TR Index in 1989.
- The IA SBBI IT Govt Infl Adj TR Index is an unmanaged index that is generally considered representative of the historical U.S. bond market on a total return basis prior to the inception of the Bloomberg U.S. Agg Bond TR Index in 1989, adjusted for inflation.
- The IA SBBI IT US Large Stock TR Index is an unmanaged index that is generally considered representative of the historical U.S. stock market on a total return basis prior to the inception of the S&P 500 TR Index in 1970.
- The IA SBBI IT US Large Stock Infl Adj TR Index is an unmanaged index that is generally considered representative of the historical U.S. stock market on a total return basis prior to the inception of the S&P 500 TR Index in 1970, adjusted for inflation.
- The MSCI World NR Index is an unmanaged index that is generally considered representative of all-world stocks on a net return basis.
- The **Russell 1000 TR Index** is an unmanaged index that is generally considered representative of the 1,000 largest stocks in the entire U.S. stock market on a total return basis.
- The **Russell 1000 Growth TR Index** is an unmanaged index that is generally considered representative of the stocks within the 1,000 largest stocks in the entire U.S. stock market that have higher valuations than the index average, on a total return basis.
- The **Russell 1000 Value TR Index** is an unmanaged index that is generally considered representative of the stocks within the 1,000 largest stocks in the entire U.S. stock market that have lower valuations than the index average, on a total return basis.
- The Russell 2000 TR Index is an unmanaged index that is generally considered representative of the 2,000 largest stocks in the entire U.S. stock market on a total return basis.
- US Active Fund Short-Term Bond is an average of only actively-managed funds within the US Fund Short-Term Bond category as defined by Morningstar.
- US BLS CPI All Urban NSA 1982-1984 is an unmanaged index that tracks the rate of U.S inflation on a non-seasonally adjusted basis as calculated by the U.S. Bureau of Labor Statistics.
- US Fund Money Market Taxable is an average of funds within the US Fund Money Market Taxable category as defined by Morningstar.
- The **Burgiss Secondaries Index as of 9/30/23** is an unmanaged index compiled by MSCI that tracks the performance of private investments focused on Secondaries Markets, as of the most recent update on 9/30/23.
- The Burgiss Buyout Index as of 9/30/23 is an unmanaged index compiled by MSCI that tracks the performance of private investments focused on Buyout Markets, as of the most recent update on 9/30/23.
- The Burgiss Venture and Growth Index as of 9/30/23 is an unmanaged index compiled by MSCI that tracks the performance of private investments focused on Venture and Growth Markets, as of the most recent update on 9/30/23.

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Student of the Market: February 2024

Important notes:

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