GLOBAL ASSET MANAGEMENT
GROUP F

MACROECONOMICS OUTLOOK, AND PORTOFOLIO STRATEGY

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THE FED MONETARY POLICY AND U.S FISCAL POLICY DURING THE COVID 19 CRISIS 01

The COVID-19 viral pandemic has been an unprecedented global event that has forced the world's economic powers to take unprecedented **financial**, **sanitary** and **economic measures**. The pandemic affected lives around the world and had a profoundly negative impact on the global economy in 2020 and continues to impact the global economy today. Thanks in part to the fiscal and monetary policies adopted by governments in 2020, the economic downturn in 2020 was **not as severe as initially feared**.

As soon as the first signs of the COVID-19 pandemic appeared, US financial institutions were on alert and reacted quickly with an action plan designed to reduce the impact of the crisis on the US economy. The Federal Reserve, better known as the Fed, was particularly proactive at this critical time

Traditional monetary policy measures were swift, starting with **interest rate cuts**, with the Fed deciding to reduce its Federal Funds Rate (FFR) by **0.5% twice** in **less than two weeks**. On 15 March, the FFR was cut to close to zero. The main aim of this measure was to ease the financial burden on households and businesses.

The Fed also introduced measures to provide liquidity and funding in order to keep the money market functioning. In the days following the Covid 19 crisis, **Treasury bonds** seemed to **lose their safe-haven status**. Their price began to **fall sharply**, **market volatility** reached its **highest level since 2009** and liquidity evaporated.

Furthermore, the Fed took decisions to promote access to credit more directly for households, businesses and local and state governments. It resized and restarted programmes to purchase Treasury securities and mortgage-backed securities (MBS).

Mortgage-backed securities have not been spared by the " **cash rush** ". The reduction in their price triggered cycles of self-sustaining losses in MBS sales. The Fed bought back **$458.1B of MBS** between 16 March and 13 April to **keep the market afloat**. This action finally slowed the pace of its repurchases in April following a marked improvement in the functioning of the markets.

Finally, we will bring together the temporary adjustments made by the Federal Reserve to regulations and supervisory practices, with the aim of encouraging banks to actively support the flow of credit to their customers, be they individuals or businesses.

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https://www.ofce.sciences-po.fr/blog/la-fed-et-le-systeme-financier-prevenir-plutot-que-guerir/

Following the decisions taken by the FED, the **US government** also rolled out its **fiscal policy**. The COVID-19 pandemic was marked by a series of unprecedented measures aimed at minimizing the economic impact of the crisis. The government acted **quickly** and **massively** to provide financial support to individuals, businesses and the healthcare system. This response was very significant in terms of cost, with a total of over **$5,000B** spent. On average, the budget plan adopted at the start of the pandemic represented **5.2% of GDP**.

First of all, the government introduced the extension of unemployment insurance to cover people affected by job loss due to the pandemic, an additional federal unemployment benefit was introduced. The **CARES** (Coronavirus Aid, Relief, and Economic Security) **Act**, added $600 per week to existing unemployment benefits. In addition, pandemic legislation extended the coverage of the unemployment insurance program to include workers such as Uber drivers and the self-employed (14% of the overall budget).

Secondly, State governments faced a substantial **increase in expenditure** as a result of the pandemic. In response, the government has put in place a range of assistance measures for States and local authorities. Funds were provided to States and local authorities to help them meet the additional costs associated with the pandemic and to compensate for the loss of tax revenues. **(11% of the overall budget)**.

In addition, expenditure on public health measures accounted for around **$629B** of the **$5,200B** spent on emergency aid in the event of a pandemic. Given the widespread nature of the COVID-19 infection and the large number of deaths, this expenditure was all the **more essential** given that the **recovery of economic growth** depended on **controlling the virus**. These funds were made available to support health centres and medical research into COVID-19, including the development of vaccines and treatments.

Then came the development of **TIME STIMULUS PAYMENTS** (direct payments to citizens). The government has issued several series of direct payments to eligible US citizens. The amount of these payments varied according to income and family composition, but the basic amount was generally around **$1,200** to **$1,400** per person, with additional payments for dependent children.

The **Paycheck Protection Program** (PPP) was created to provide loans to small businesses to help them maintain their workforce and cover expenses, including wages. Workers received most, if not all, of their wages without becoming officially unemployed or claiming unemployment insurance. **The total amount of loans granted by the PPP was around $800B dollars**.

This programme shared certain features with the **Kurzarbeit** programme, widely admired in Germany. These measures played a key role in helping individuals, businesses and health services to overcome the economic crisis caused by the COVID-19 pandemic.

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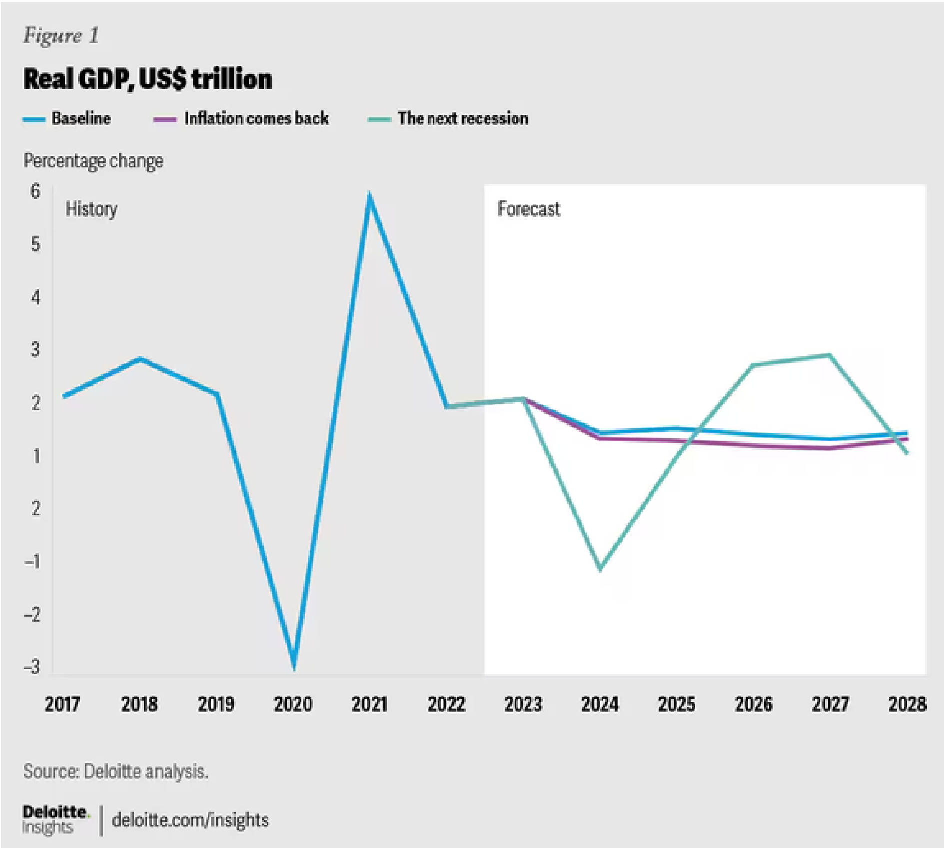
CONSEQUENCES FOR THE US ECONOMY

02

The United States has been through a turbulent economic period in recent years, marked in particular by the COVID-19 pandemic and its consequences. In response to the crisis, the US government deployed an unprecedented amount of fiscal and monetary measures, representing almost **25% of the country's GDP**. The result has been a rapid economic recovery, with **GDP growth of 5.7%** in **2021**, following a **contraction** of **-3.4% in 2020**.

According to data from the Bureau of Economic Analysis (**BEA**), this economic contraction was mainly due to disruptions caused by the pandemic. However, this recovery has come at a cost. **Inflation** has risen to alarming levels, reaching **8.3%** in **August 2022**. The labour market has also shown signs of strain, with **unemployment back to pre-crisis** levels of around **15%**.



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At the same time, the **Federal Reserve** adopted an accommodating monetary policy to ensure financial stability, but had to accelerate its normalisation in 2022 by **raising key rates to contain inflation**. Faced with these challenges, the Biden administration initiated a change of direction in 2022. **Shifting from** a policy focused on **demand** to one focused on **supply**. Long-term investments have been planned in areas such as **infrastructure** and **energy transition.** Financed in part by bipartisan legislation such as the **Infrastructure Investment**, **Jobs Act** and the **CHIPS** and **Science Act**. These measures are designed to boost US industrial competitiveness while easing inflationary pressures.

In short, the US economy is at a **crucial point**, with persistent challenges such as **inflation**, **labour market tensions** and **geopolitical uncertainties**. The economic policies adopted today will have a lasting impact on the country's future trajectory, making this a crucial time for policymakers and economists.

THE BCE MONETARY POLICY DURING THE COVID 19 03

The pandemic has also spread to other continents, including Europe. And in Europe, it's the **European Central Bank**, which oversees monetary and price stability policies within the eurozone. The eurozone includes **19 Member States** of the European Union, all of which have adopted the euro as their official currency. This leading financial institution of the European Union has faced the challenge of demonstrating flexibility in monetary policy during the Covid-19 pandemic.

As a result, the ECB has adjusted a number of monetary policy tools such as the :

- **Emergency Pandemic Purchasing Programme (EPPP)**
- **Asset Purchase Programme (APP),**
- **Corporate Sector Purchasing Programme (CSPP)**
- **Targeted Longer-Term Refinancing Operations, TLTRO III**

As well as **repo** and **currency swap lines**, according to the list on the ECB's official website. In the following paragraphs, we will highlight each of the tools supported by the European Central Bank.

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https://www2.deloitte.com/us/en/insights/economy/us-economic-forecast/united-states-outlook-analysis.html
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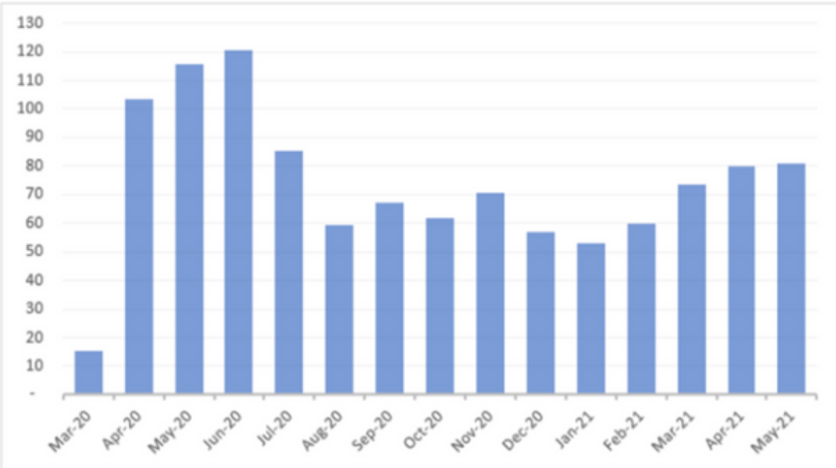
https://www.ecb.europa.eu/home/html/index.en.html#/search/covid/1

Emergency Pandemic Purchasing Programme

The EPPP is a **temporary** programme of asset purchases in the **public** and **private sectors**. Its main objective is to stabilise and control the economic risk in the eurozone caused by the various lock-down that have led to a global economic recession. The size of the programme has been **increased** by **€750B** and allowed "fluctuations in the distribution of purchase flows over time, between asset classes and between jurisdictions". As a result, the ECB noted that **between March 2020** and **May 2021**, a total of **€1,100B** in net asset purchases were made under the PEPP.

PEPP: net asset purchases by month, March 2020 - May 2021 (EUR billion)



Source: Based on History of monthly net purchase under the PEPP.

Asset Purchase Programme

The Asset Purchase Programme (APP) of the ECB is an **non-conventional monetary policy instrument** designed to **stimulate the economy**. The APP works by **buying financial assets**, such as **government bonds** and **corporate bonds**, on the secondary markets. These different types of financial asset are divided into different financing plans (**PSPP**, **CSPP** and others). These purchases increase the money supply in circulation and exert downward pressure on long-term interest rates, making financing less expensive for businesses and households. By lowering borrowing costs and increasing liquidity, the **PPA** encourages **investment and consumption**. Which in turn stimulates economic growth and helps to bring inflation back towards the symmetrical 2% target set by the ECB. To counter the COVID-19 crisis, a programme budget of up to **€120B** has been allocated until the end of **2020**.

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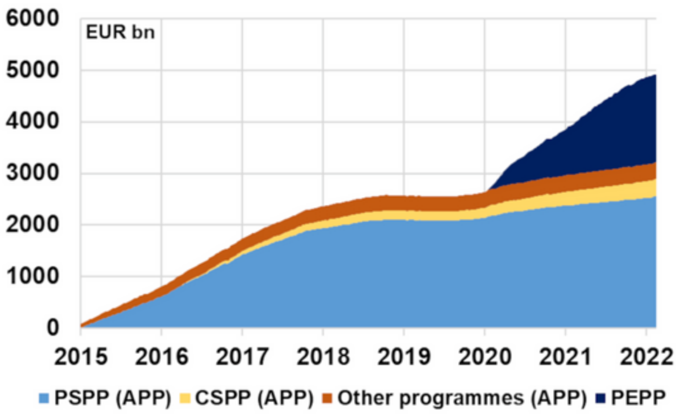
https://blocnotesdeleco.banque-france.fr/en/blog-entry/taking-stock-two-years-after-launch-pepp
https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/asset-purchase.fr.html



Corporate Sector Purchasing Programme

The Corporate Sector Purchase Programme is a programme for buying **corporate bonds** on the **secondary markets**. Central banks in the eurozone that have been selected by the ECB can buy bonds issued by companies. During the Covid-19 crisis, the CSPP led to a **fall in the interest rates** paid by companies. This **facilitated** their **financing** and **stimulated production**. As a result, the fall in interest rates led to an increase in bond issuance on the bond market. This has contributed to the growth of the European bond market since the 2008 crisis.

Targeted Longer-Term Refinancing Operations

Long-term refinancing operations **ensure** the **liquidity of cash-holding units** and **guarantee budgetary stability**. A **TLTRO** is a type of credit facility that allows banks to borrow from a central bank for a long period (generally for periods ranging from a few months to several months). In response to the crisis, the Board of Directors decided to implement new fixed-rate refinancing operations for a limited period. The Board then provided **€388.9B** of liquidity to the eurozone financial system, supporting banks and protecting and regulating the situation on short-term money markets.

Collateral frameworks

Collateral frameworks are important tools in the execution of monetary policy. In March 2020, the Board of Directors **extended credit eligibility** by adjusting the eligibility criteria and risk management for lending to the corporate sector. Furthermore, **non-marketable assets decreased by 20%** due to the reduction of collateral haircuts. On 22 April 2020, the Board introduced measures to protect the availability of collateral against possible downgrades.

Swap lines

Swap lines are **agreements between central banks** to exchange currencies in order to **maintain foreign currency liquidity** in the event of market distortions. In October 2013, the Bank of Canada, the Bank of England, the Bank of Japan, the ECB, the Federal Reserve and the Swiss National Bank decided to replace the existing temporary bilateral liquidity swap line with a permanent arrangement. The banks jointly decided to enhance the provision of **US dollar** liquidity globally through the existing permanent arrangements.

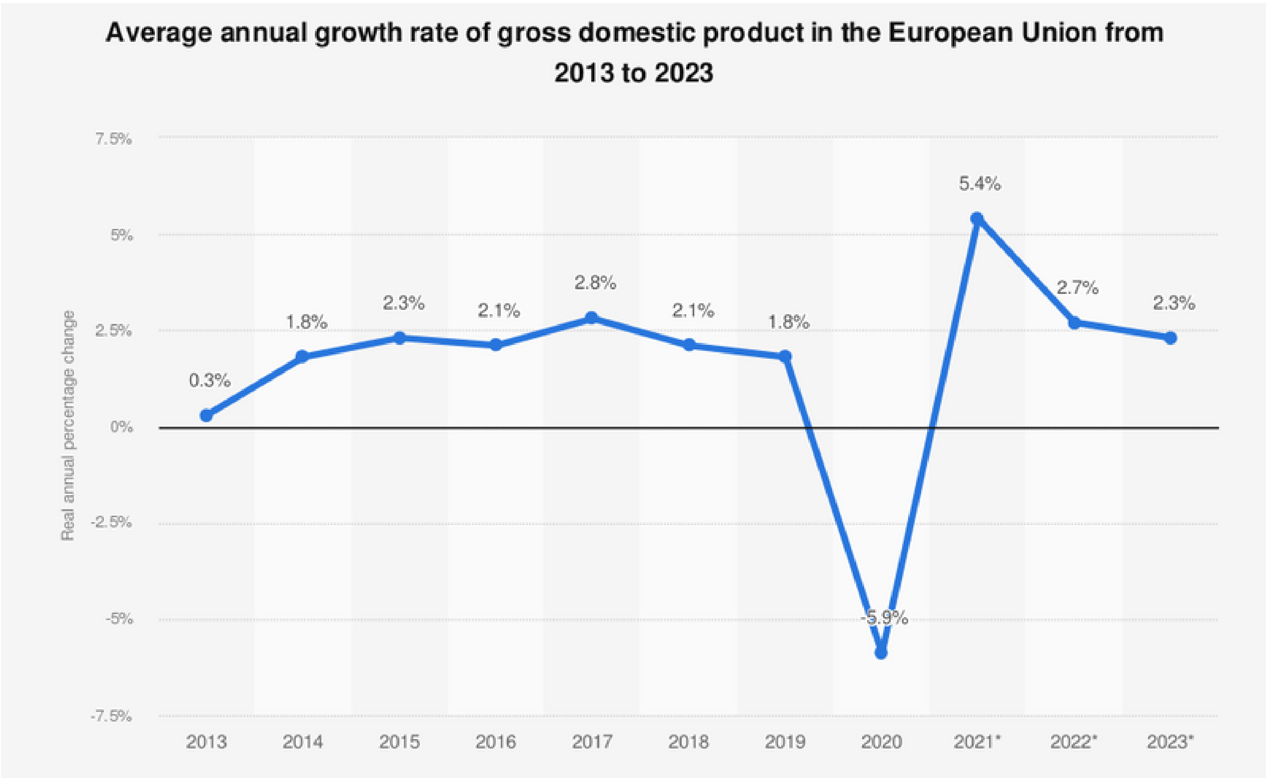
https://www.banque-france.fr/politique-monetaire/cadre-operationnel-de-la-politique-monetaire/les-mesures-non-conventionnelles/les-programmes-dachats-dactifs
https://fr.wikipedia.org/wiki/Corporate_Sector_Purchase_Programme

CONSEQUENCES FOR THE EUROPEAN ECONOMY 04

All these adjustments have had an effect on the European economy, leading to a **significant fall** in **GDP of 5.9%** in **2020**. This has slowed people's work and worsened their financial situation. Thanks to online services and e-commerce, other sectors were able to attenuate the decline. Since these adjustments, the economy has strengthened, enabling GDP in the eurozone to increase in 2021 (**5.4%**) and 2022 (**2.7%**).

The proportion of the working population that is unemployed or looking for work has also been affected. In 2020, a significant proportion of the population were out of work as a result of financial difficulties in certain sectors. As a result, the unemployment rate has risen to **7.84%** in **2020** and **7.70%** in **2021**.

The pandemic has led to an increase in the inflation rate and caused a spectacular decrease of the **french GDP** who declined by **31.4%**. A fall unprecedented since the Great Depression, according to Forbes. These alarming fluctuations were particularly worrying at the height of the pandemic and demonstrate the profound impact it has had on the economy.



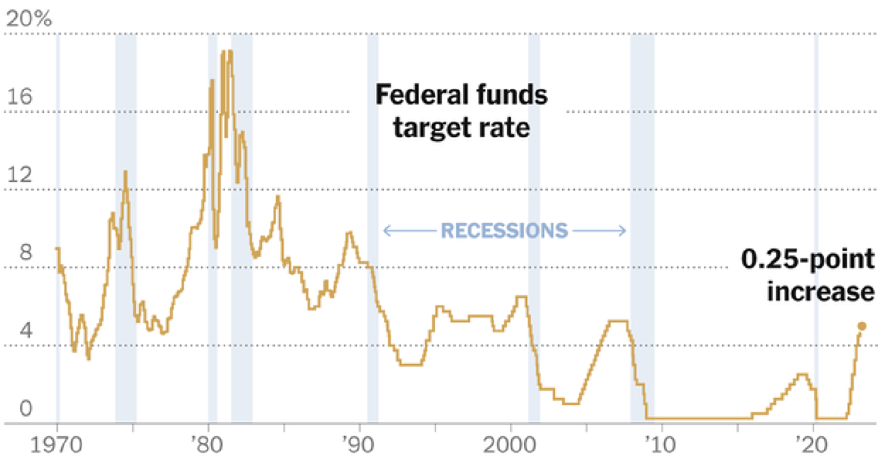
https://www.statista.com/statistics/1070317/eu-gdp-growth-rate/

FED AND ECB INTEREST RATES OUTLOOK

FED INTEREST RATES' FUTURE 01

Following our review of the monetary policies of the FED and the ECB during the COVID period, we now know the reasons why these two financial institutions have raised their interest rates since March 2022. Let's start by analysing the FED's strategy. The aim of both the Fed and the ECB is to bring current **inflation down to 2%**, which corresponds to moderate inflation that is **beneficial for industry**.

FOMC Meeting Date	Rate Change (bps)	Federal Funds Rate
July 26, 2023	+25	5.25% to 5.50%
May 3, 2023	+25	5.00% to 5.25%
March 22, 2023	+25	4.75% to 5.00%
Feb 1, 2023	+25	4.50% to 4.75%
Dec 14, 2022	+50	4.25% to 4.50%
Nov 2, 2022	+75	3.75% to 4.00%
Sept 21, 2022	+75	3.00% to 3.25%
July 27, 2022	+75	2.25% to 2.50%
June 16, 2022	+75	1.50% to 1.75%
May 5, 2022	+50	0.75% to 1.00%
March 17, 2022	+25	0.25% to 0.50%



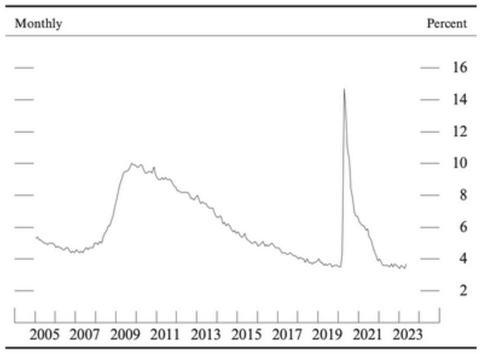
To achieve this, the Fed needs to **raise key interest rates** in order to **slow the US economy** and therefore **reduce the average purchasing power per person**, which will ultimately **lower the inflation rate**. Firstly, **since March 2022**, the Fed has raised rates by **5.25%**. A **sudden** and **rapid** rate increase that exceeds the rate increase that took place during the financial crisis of the 1980s, known as the Savings and Loan crisis.

https://www.federalreserve.gov/monetarypolicy/files/20230616_mprfullreport.pdf
https://www.nytimes.com/2023/03/22/business/federal-reserve-interest-rates-banks.html
https://www.forbes.com/advisor/investing/fed-funds-rate-history/
https://www.oecd-ilibrary.org/sites/ce188438-en/index.html?itemId=/content/publication/ce188438-en

The Fed and the ECB are now starting to suffer the consequences of the monetary policies they put in place during the Covid crisis. Today, inflation in the United States stands at 3.2% and interest rates at 5.5%. This is good news, but one of the **key factors** in bringing inflation down is the **level of unemployment**. In fact, in order to reduce the inflation rate, the average purchasing power per inhabitant must fall drastically in order to **reduce overall consumption**.

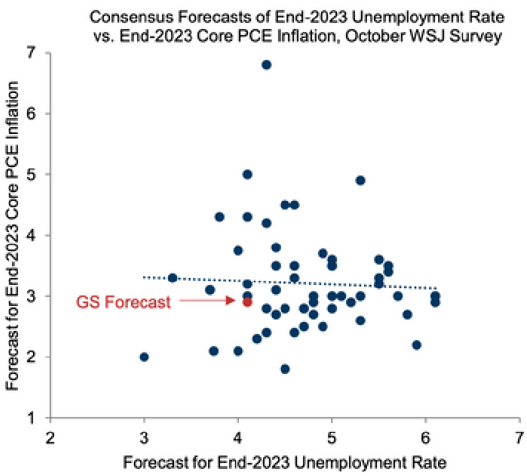
However, the unemployment rate in the United States is currently at its lowest level since the COVID crisis. This could pose a major problem for Jerome Powell and the FED, since, as we explained above, this is a key factor in reducing inflation.

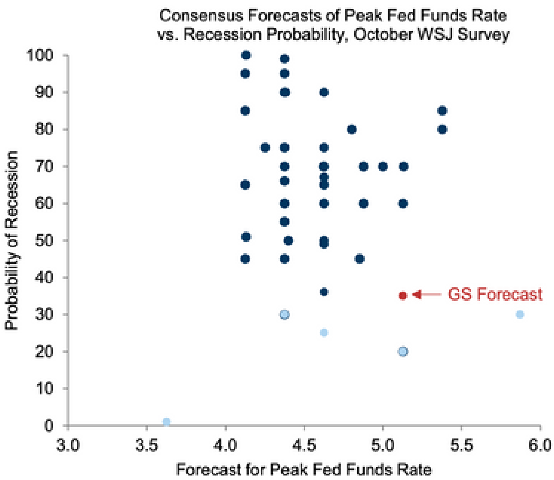
11. Civilian unemployment rate



SOURCE: Bureau of Labor Statistics via Haver Analytics.

Nevertheless, we can see from the report by Goldman Sachs that they foresee a **"path of agreement"** between **inflation** and the **unemployment rate** and are rather enthusiastic about this idea.





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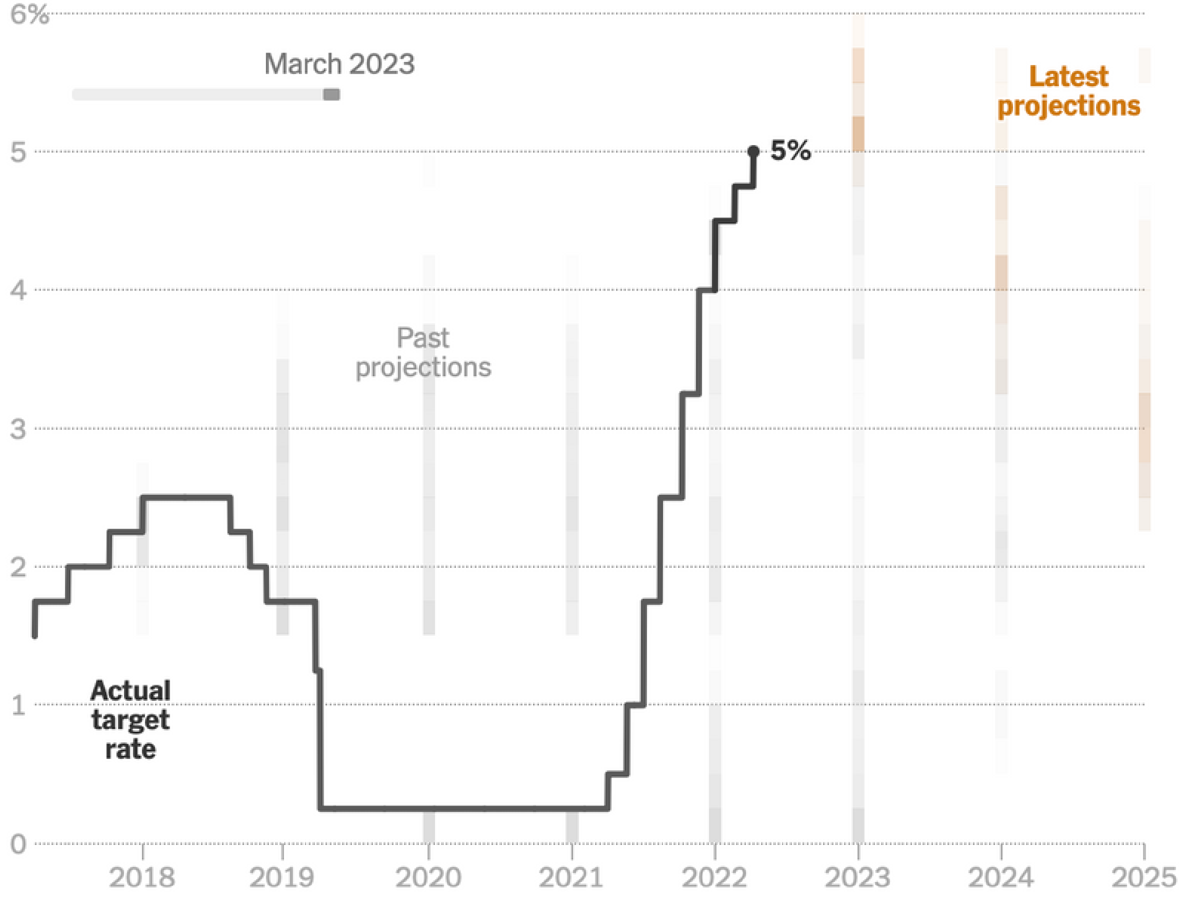
https://www.statista.com/statistics/1312060/us-inflation-rate-federal-reserve-interest-rate-monthly/
https://www.goldmansachs.com/intelligence/pages/2023-outlooks/
https://www.goldmansachs.com/intelligence/pages/gs-research/2023-us-economic-outlook-approaching-a-soft-landing/report.pdf

By the end of 2023, they expect **inflation** to **remain stagnant** at around 3% and the **unemployment rate** to rise slowly to just over **4%**. This would force the Fed not to raise interest rates until the end of 2023. And leave their current rate of **5.5% fixed** until January 2024. Furthermore, given this scenario, Goldman Sachs estimates that there is a **35%** risk of the US economy slipping into **recession** (they are among the most optimistic).

Given these details, we believe that the FED will **maintain** but stop **raising interest rates** until the end of 2023. Firstly, in order to **analyse the effects** of their recent rate rises, which according to some experts have not yet been felt in the US economy. In addition, we should remember that as interest rates rise, it becomes more and more difficult for the Fed to impose further increases. Indeed, this could cause the economy to collapse and **trigger a banking crisis**.

How the Fed's projections for future interest rates have evolved

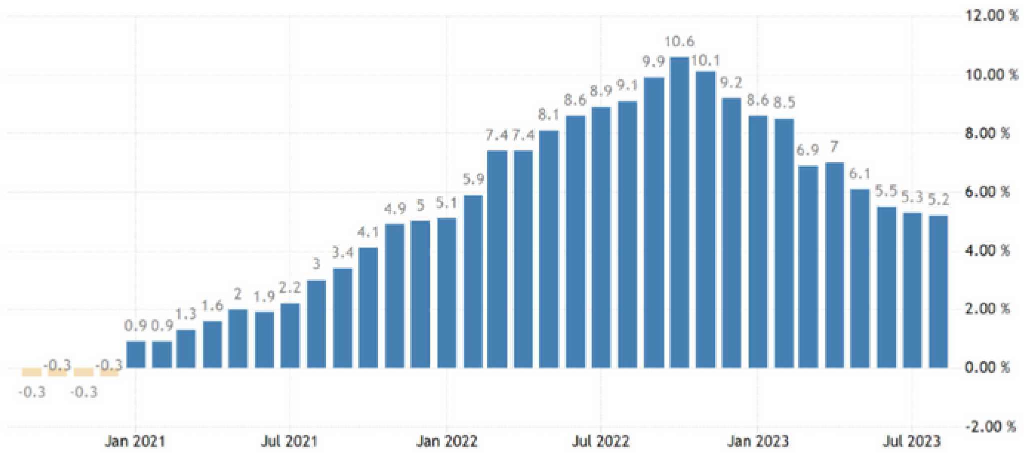


Note: The rate is the upper limit of the federal funds target range. Projections for future rates go back to March 2018. • Source: Federal Reserve • By Lazaro Gamio

https://flowingdata.com/2023/04/07/changing-fed-projections/

ECB INTEREST RATES' FUTURE 02

In Europe, inflation has experienced a significant surge since 2021, largely attributable to the pandemic's substantial impact. In **2021**, the **average inflation rate** stood at **2.6%**, a notable increase compared to the **0.3%** observed in **2020**. Subsequently, it surged to **8.4%** in **2022**, reaching its zenith at **10.6%**, as reported by the ECB. By June 2023, the inflation rate **receded** by **3%** to **5.4%**. The ECB's aspiration and target are for inflation to attain 2% in the medium term.



Trading Economics

To this end, the Governing Council has chosen to **elevate ECB interest rates** in response to the projected inflation trends and incoming economic and financial data. The ECB's macroeconomic projections for the eurozone in September anticipate an **average inflation rate** of **5.4%** in **2023**, **3%** in **2024**, and **2.2%** in **2025**. This represents an **upward revision** for **2023** and **2024**, and a **downward revision** for **2025**. The upward revision is primarily attributed to an elevated trajectory in energy prices.

June 2023 (annual percentage changes)

	2021	2022	2023	2024	2025
HICP	2.6	8.4	5.4	3.0	2.2
Real GDP	5.3	3.5	0.9	1.5	1.6

ECB Europa

In the fight against inflation, the ECB opted to raise interest rates from **July 2022** onwards, doing so more than **10 times consecutively**, culminating in a record rate on September 14, 2023. Consequently, the rate on main refinancing operations reached a **22-year peak** at **4.5%,** while the rate on the deposit facility established a new record of **4%**. Nonetheless, the ECB has indicated a tightening of policy as inflation has begun to decline.

https://flowingdata.com/2023/04/07/changing-fed-projections/
https://www.ecb.europa.eu/pub/projections/html/ecb.projections202309_ecbstaff~4eb3c5960e.en.html

Interest rate euro area

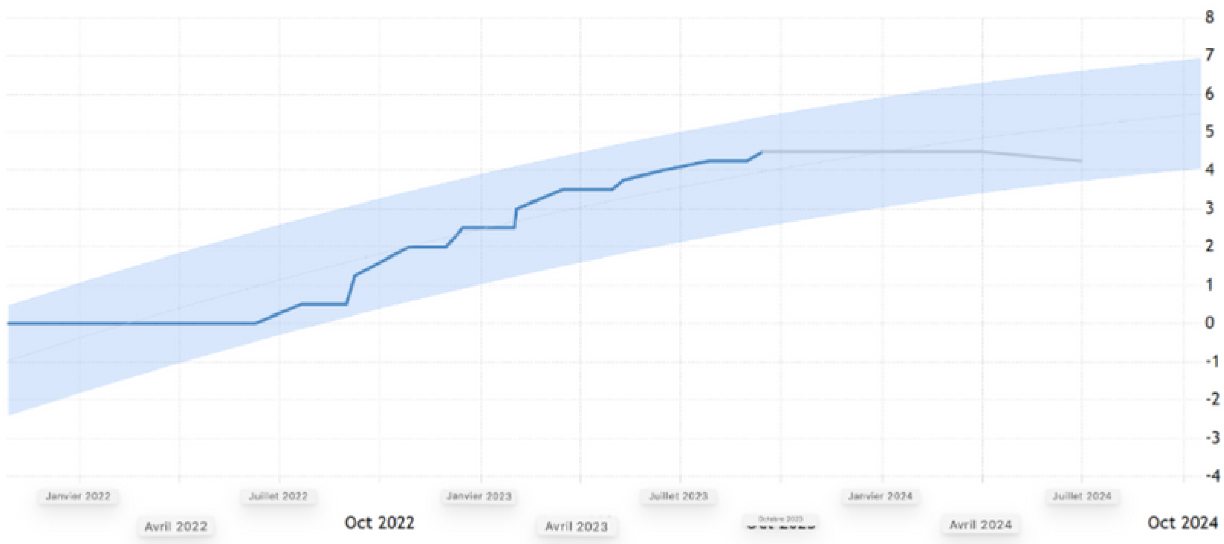
Trading Economics

According to the ECB's global macroeconomic models and analysts' expectations, the eurozone interest rate is anticipated to reach **4.50%** by the end of this quarter. In the longer term, it is projected to stabilize around **3.75%** in **2024** and **2.75%** in **2025**.

In our view, grounded in analysts' reports, the eurozone interest rate has already **climbed to a level that may prove challenging to further increase**, given its already elevated status and the declining trend in inflation. Considering the medium-term target of 2%, the **Governing Council** should consider regulating the interest rate downward until this stated objective is attained.

We believe that the **rate** should either **remain stable** or experience only a **minimal reduction** until the year's end, given the objective of achieving an average inflation rate equivalent to **5.6%** in **2023**, which currently stands at **6.1%**. Consequently, there is still a substantial requirement for inflation to decrease over the next three months.

Forecast Interest Rate Euro area



Trading economics

THE RECENT RISE OF THE FINANCIAL MARKET AND ITS OUTLOOK

THE SITUATION OF THE US STOCK MARKET IN 2022

01

In order to understand why the US stock market rose by 24% in 2023 we must first look at the decrease in the US stock market in 2022 which can be attributed to several key factors:

- The FED had to introduce **emergency policies** to support the economy during the pandemic, and in 2022 began signalling its intention to adopt a tighter monetary policy. This led to interest rate rises. In addition, the reduction in assets accumulated by the Fed had the direct effect of worrying investors.

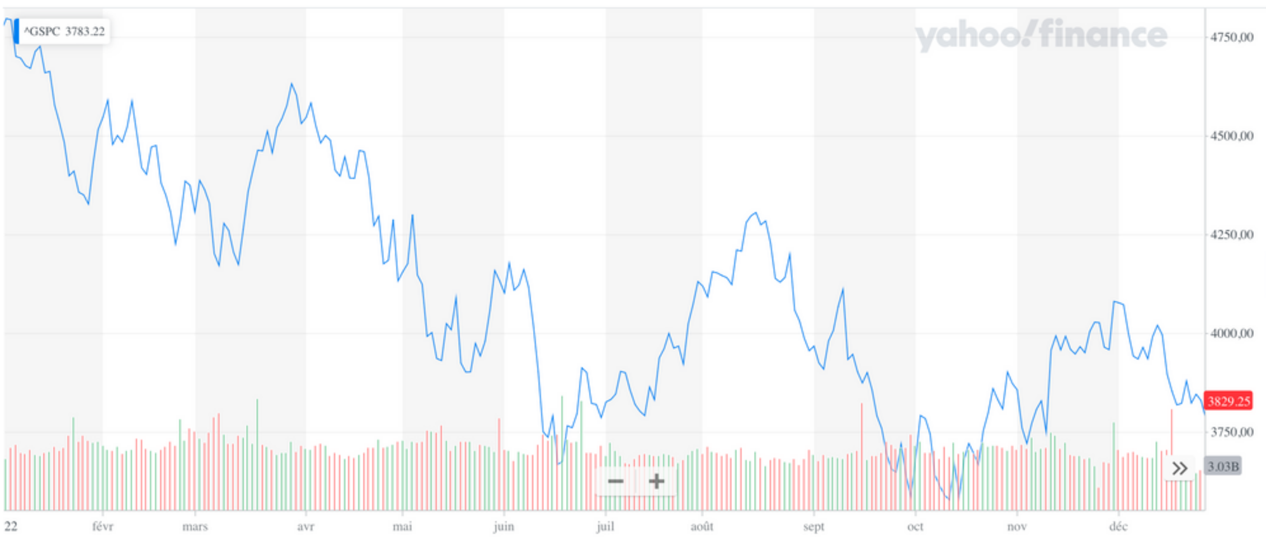
- The second major consequence was the **rapid rise in inflation**, which forced the Fed, as we have just seen, to apply a tighter monetary policy.

- Expectations of tighter Fed policy have led to higher bond yields, making **bonds more attractive** relative to equities. This has particularly affected high-growth sectors such as technology, whose shares are less attractive when bond yields are high.

- Finally, the turmoil in China has not helped the situation. Containment measures to control **COVID-19 in China** had repercussions for production and economic activity, which in turn had an impact on global markets.

Overall, 2022 was **a year to forget for the US market**, with the Nasdaq losing 33% over the year, the Dow Jones 8% and the S&P 500 falling 19%. However, investors have kept a close eye on the economic situation and monetary policy developments in order to anticipate future trends as effectively as possible, and thus succeed in driving the US stock market up by 24%.

S&P 500 performance over 2022



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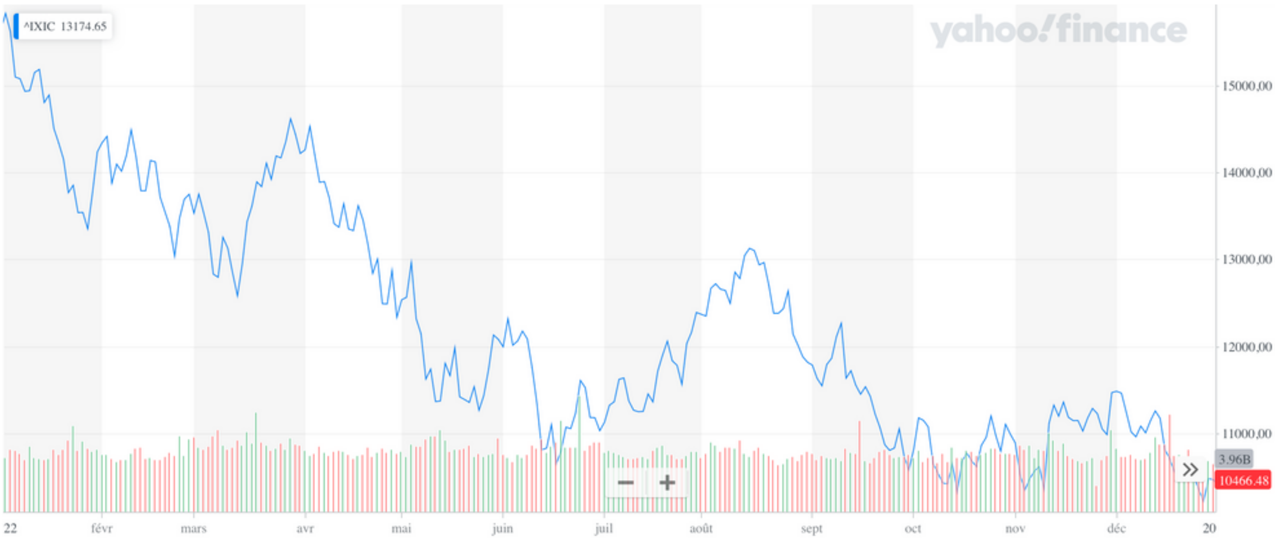
Dow Jones performance over 2022

Nasdaq performance over 2022



THE SITUATION OF THE US STOCK MARKET IN 2023

02

The rise of the US stock market in 2023:
The rise of 24% of the American market this year can be explained by several factors:

- Firstly, **massive investment** by the United States in strong technology stocks. According to BofA Global Research data, a record $8.5 billion was invested in technology stocks during the week of early June 2023. What's more, the Nasdaq has risen sharply, correlating strongly with investment in the technology sector, with an increase of 33% in 2023.

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https://fr.finance.yahoo.com/quote/%5EDJI?p=%5EDJI
https://fr.finance.yahoo.com/quote/%5EGSPC/

- **Strong growth in AI**. This is the sector that has been most successful in recent months, thanks in particular to a major technological breakthrough. As a result, the shares of technology mega-caps such as Nvidia, Apple and Microsoft have received a major boost. Investors have been seduced by the growth prospects offered by AI. What's more, Mr Hatfield said he "believes 100% in the AI boom; I'd be shocked if, by the end of the year, these stocks weren't significantly higher".

- We have noticed a **strong allocation** of investors to **liquid assets.** BofA's data shows that the allocation of investors to liquid assets is higher than usual, which potentially leaves room for a further rise in the markets.

S&P 500 performance since January 2023

Dow Jones performance since January 2023

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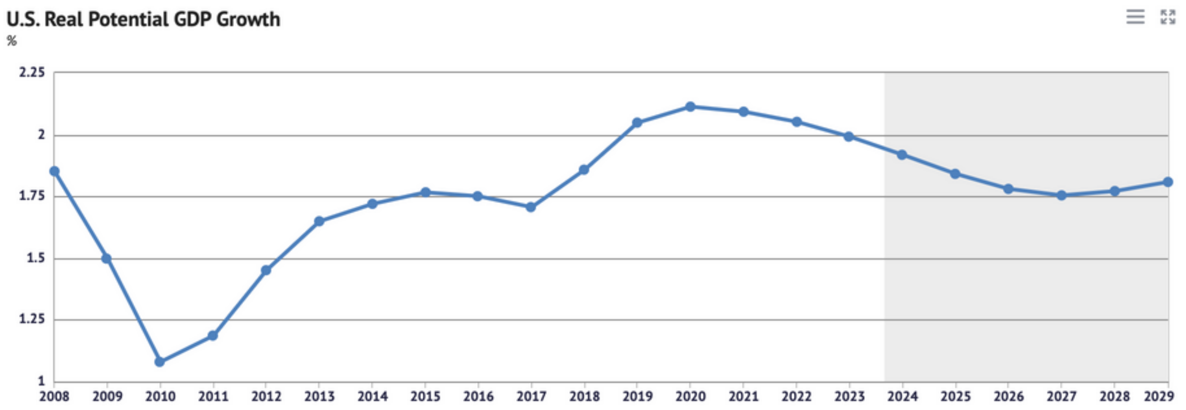
https://www.zonebourse.com/cours/indice/S-P-500-4985/actualite/Wall-St-Week-Ahead-La-montee-en-fleche-des-megacapitalisations-americaines-conduit-certains-a-se-d-44029315/
https://fr.finance.yahoo.com/quote/%5EIXIC/history/
https://fr.finance.yahoo.com/quote/%5EDJI?p=%5EDJI
https://fr.finance.yahoo.com/quote/%5EGSPC/

Nasdaq performance since January 2023

Global US market since January 2023

With this overview of the US market, we can see that sectors such as **technology**, **communication services** and **consumer cyclicals** are the sectors that are **carrying** a **much-weakened US industry**. The **medical**, **banking** and **utilities sectors** are in a weaker position. The real question is whether the technology sectors will be able to support the US economy for much longer. Given that **Michael Burry** recently opened **short positions** against the **Nasdaq** and the **S&P500**, there are doubts about the ability of these sectors to **continue** to **flourish** in **late 2023** and early **2024**.

https://fr.finance.yahoo.com/quote/%5EIXIC/history/
https://finviz.com/map.ashx?t=sec_all&st=ytd
https://finviz.com/map.ashx?t=etf&st=w52
https://www.tradingview.com/chart/?symbol=FX%3AEURUSD
https://am.jpmorgan.com/us/en/asset-management/adv/insights/market-insights/guide-to-the-markets/economic-and-market-update/



	10	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
%	1.1	1.2	1.5	1.6	1.7	1.8	1.8	1.7	1.9	2.0	2.1	2.1	2.1	2.0	1.9	1.8	1.8	1.8	1.8	1.8

TRADING ECONOMICS Calendar News Markets Indicators Countries Forecasts

Currencies Stocks Commodities Bonds Crypto Export

Major	Price	Signal	Q2/23	Q3/23	Q4/23	Q1/24
US30	33076	▼	32,308	31,346	30,410	29,504
US500	4121.55	▼	4,001.18	3,881.95	3,766.27	3,654.03
USNDX	13477.75	▼	12,942.64	12,556.95	12,182.75	11,819.70
USND	12,343	▼	11,919	11,563	11,219	10,885
US400	2,416	▼	2,360	2,290	2,222	2,155
US2000	1,736.18	▼	1,688.97	1,638.64	1,589.81	1,542.43
USVIX	17.99	▼	16.52	16.03	15.55	15.09

Major Index Outlook to Q1, 2024. Screenshot courtesy of Trading Economics.

When it comes to the outlook for the US economy, **opinions differ widely**. There are professionals who believe that 2023 will be the year of the **slowdown** before the big **rebound period from 2024** and the **Fed rate cut**. Others think that a long economic slowdown is on the way. It's hard to come to a clear-cut opinion, as it seems that in difficult times the stock market does as it pleases.

We believe that we have entered a **period of transition**, and that the current health of the market is **far from healthy**. A small pullback would do no harm, so that the market can return to the top with greater solidity. We believe that the **US industry** will enter a **minor recession** at the end of **2023/2024**.

https://knoema.com/qhswwkc/us-gdp-growth-forecast-2019-2024-and-up-to-2060-data-and-charts
https://gordcollins.com/stock-market/2024-forecast/#:~:text=Long%20forecast%20sees%20the%20Dow,S%26P%20500%20down%20by%2010.9%25.

THE EUROPEAN STOCK MARKET IN 2023 03

The threat of an imminent recession looms as Europe records a **significant fall** in the purchasing managers' index (**PMI**) in August, reaching its **lowest** level since **November 2020**. This contraction is affecting both the services and manufacturing sectors. The main concerns relate to the **delayed impact** of rising interest rates on the economy, with particular concerns about the deterioration in growth prospects as borrowing costs rise.

The prospect of a **recession** in **Europe** or the **United States** is all the more worrying given that **China**, the world's second-largest economy, is facing a **persistent property crisis**. In addition, governments have little room for maneuver to stimulate activity, with central banks limited in their fight against inflation, and calls for cuts in public spending in some countries, such as Germany. This situation has contributed to the **stagnation** of European stock markets in recent months.

In addition, companies have struggled to absorb the impact of the war in Ukraine. Geopolitical tensions persist, with the conflict between Russia and Ukraine continuing to disrupt the **agricultural commodities** and **energy markets.** Investors, therefore, remain vigilant in the face of these factors, which could further disrupt the financial markets.

After a year of relentless fighting against inflation, during which central banks carried out the most drastic rate hikes in decades, the time has come to look at the results. Although the **results** are **encouraging**, there is **still a long way to go** to reach the **2%** target set by the US Federal Reserve and the European Central Bank. In July, inflation in the eurozone stood at **5.3%**, compared with **8.9%** a year earlier, while across the Atlantic it was **3.2%**, compared with **8.5%**.

In Europe, London's **FTSE 100** was up **0.2%** at 7,673.29, Paris's **CAC 40** was up **0.3%** at 7,294.38 and Frankfurt's **DAX 40** was in the red fractionally at **15,726.05**.

However, core inflation, which excludes volatile items such as energy and food, is taking **longer to recede**. The ECB estimates that it has **peaked** at **5.4%** and should now start to fall. Consequently, it is still too early to declare that inflation has been beaten.

Indeed, by referring to the forecast data available on tradingseconomics.com, it is clear that the tables presented indicate a **possible reduction in the inflation rate** until the second quarter of 2024. However, the entire **European economy** is expected to **slow** and fall more or less depending on the various stock market indices. We therefore **expect** the European market to **slow** at least until the end of the year, even if the battle against inflation is well under way.

Prices	Actual	Q3/23	Q4/23	Q1/24	Q2/24
Inflation Rate (%)	5.20	5.5	5.6	4	3.5
Inflation Rate MoM (%)	0.50	-0.1	0.1	0.2	0.1
Consumer Price Index CPI (points)	124.03	126	127	127	128
Core Consumer Prices (points)	116.79	117	117	118	119
Core Inflation Rate (%)	5.30	4.5	3.2	3	2.5
GDP Deflator (points)	120.89	121	124	124	125
Producer Prices (points)	145.00	147	149	150	149
Producer Prices Change (%)	-7.60	-12.2	-8.7	-2.8	1.9
Food Inflation (%)	11.60	8.5	4.5	4	3.6
Energy Inflation (%)	-3.30	-8	-10	-6	2.5
Energy Prices (points)	151.97	149	142	144	151
Producer Price Inflation MoM (%)	-0.50	0.2	0.1	0.3	0.2
Selling Price Expectations (points)	3.60	4	5	6	7
CPI Housing Utilities (points)	128.85	140	141	136	134
CPI Transportation (points)	126.85	127	127	127	127

Euro Area Forecast: tradingseconomics.com

European Stock Market Forecast

Europe	Price	Signal	Q3/23	Q4/23	Q1/24	Q2/24
GB100	7,684	▼	7,557	7,406	7,258	7,113
DE40	15,557	▼	15,498	15,112	14,735	14,369
FR40	7,185	▲	7,187	7,000	6,818	6,641
IT40	28,428	▼	27,961	27,145	26,351	25,582
ES35	9,502	▼	9,310	9,076	8,849	8,626
MOEX	3,049	▼	3,041	2,933	2,828	2,728
NL25	730	▼	723	705	687	670
BIST 100	8,039	▼	7,475	7,017	6,588	6,185
CH20	11,015	▼	10,965	10,736	10,514	10,295
Stockholm	2,166	▼	2,134	2,075	2,018	1,962
WIG	66,519	▼	65,286	63,272	61,312	59,419
BE20	3,635	▼	3,625	3,540	3,457	3,376
Oslo	1,503	▼	1,463	1,424	1,387	1,350
ATX	3,159	▼	3,087	2,995	2,906	2,819
Copenhagen	2,129	▼	2,121	2,054	1,989	1,926
Helsinki	9,717	▼	9,635	9,390	9,150	8,917
Helsinki 25	4,326	▼	4,294	4,185	4,078	3,974

https://tradingeconomics.com/forecasts
https://tradingeconomics.com/forecast/stock-market

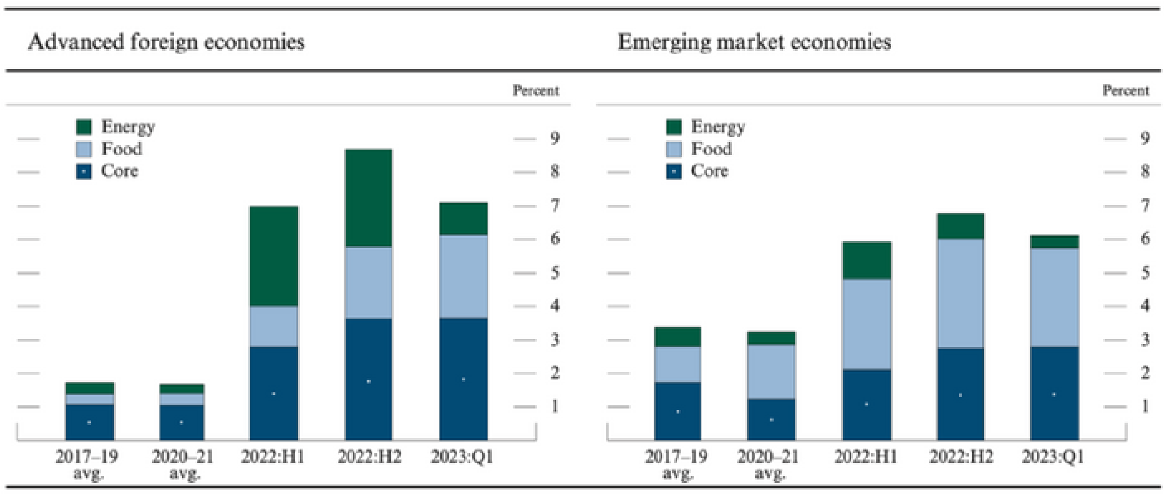
EMERGING COUNTRIES FINANCIAL MARKET IN 2023

04

The graphs below allow us to compare the global economies of advanced foreign countries and emerging markets. We can see substantial variance in terms of overall value, as well as a distinct percentage distribution between the energy sector (significantly higher in advanced foreign economies) and the food sector (with a higher percentage in emerging markets).

From a general point of view, we can see that emerging countries are less affected by the recent rise in inflation affecting the most developed countries. Overall **inflation** in **emerging countries** is just **over 6%**. For **developed countries**, it is **closer to 7%**. That's **16% higher**.

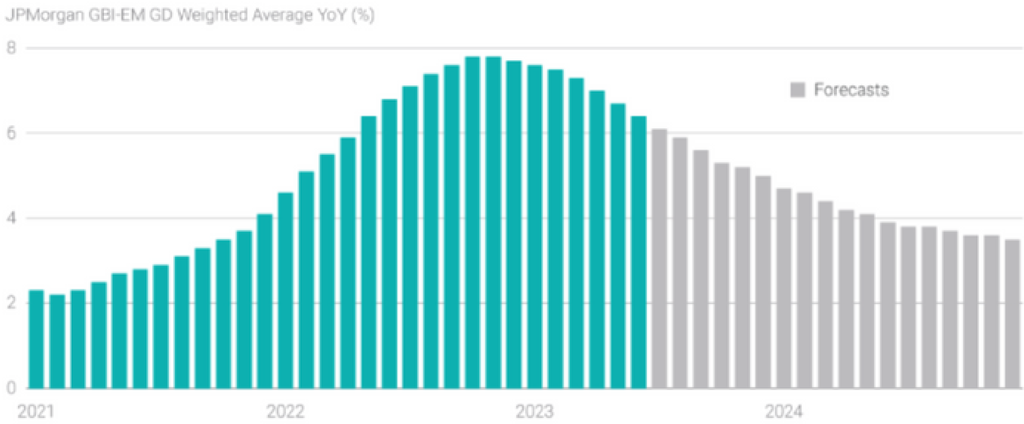
41. Foreign consumer price inflation components



By mid-2023, most emerging market central banks should have completed their tightening cycle, with the exception of Thailand and South Africa. We believe that these emerging market central banks are preparing for a cycle of **interest rate cuts**, likely to start in the **third quarter of 2023** and extend well **into 2024**. China has already embarked on this rate-cutting path, and we expect Latin America and Eastern Europe to follow suit.

https://www.federalreserve.gov/monetarypolicy/files/20230616_mprfullreport.pdf

Exhibit 10: Emerging Markets Core Inflation



As of 31 May 2023
Source: Lazard, Haver Analytics, JPMorgan

Over the last two decades, emerging markets have undergone significant changes, offering constantly evolving investment opportunities. **Liquidity** in these markets has **increased**, and **investor interest has grown**. Demographic factors, such as in India, where almost **80%** of the population is **under 50**, mean that **growth** will be **sustained** until the **2060s**. Emerging markets have an advantage in terms of economic growth over developed economies, an advantage that is set to continue until at least the end of 2024. In Indonesia, the country is moving up the metals value chain, which is crucial for the production of electric vehicles. In Latin America, particularly Brazil and Mexico, growth prospects have improved due to increased foreign direct investment. Barring a major global recession, emerging markets should enter a **phase of economic recovery** from the end of 2023.

As of 11 April 2023
Source: Haver Analytics, International Monetary Fund

CHINA'S ECONOMIC SITUATION

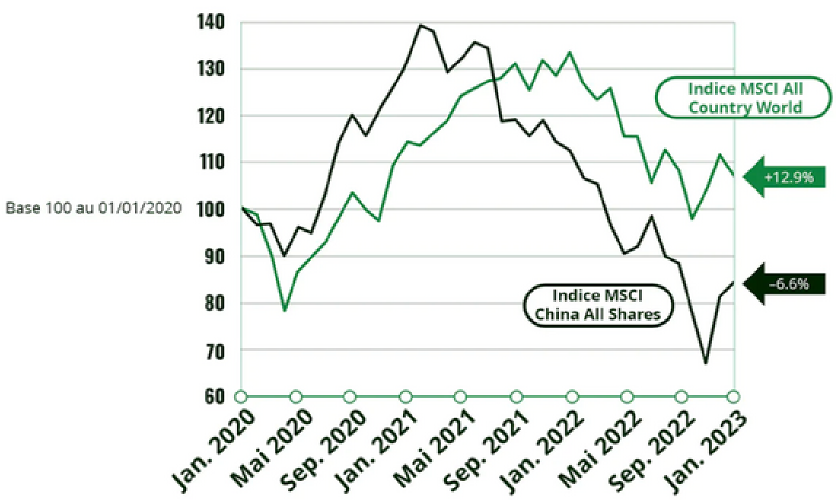
05

After a difficult 2021 and 2022, marked by **strict regulations**, geopolitical **tensions** with the **United States** and the **Evergrande property crisis**, China seems to be entering a more promising phase in 2023. The government has taken significant measures, notably the end of the "zero Covid" policy, to stimulate economic growth and support domestic demand. These measures are all the more crucial as China faces major economic challenges, including high **youth unemployment** and **stagnating exports**. GDP growth in the second quarter was just **0.8%**, well below expectations.

The government's stimulus plan targets several sectors, including **housing**, **culture, tourism** and **"green consumption"**. China is also relying heavily on the technology sector to stimulate growth even if there has been a significant reduction in its stock market capitalisation over the last two years. The surplus savings accumulated by Chinese households during the pandemic and the improvement in the labour market should also lead to an increase in consumer spending.

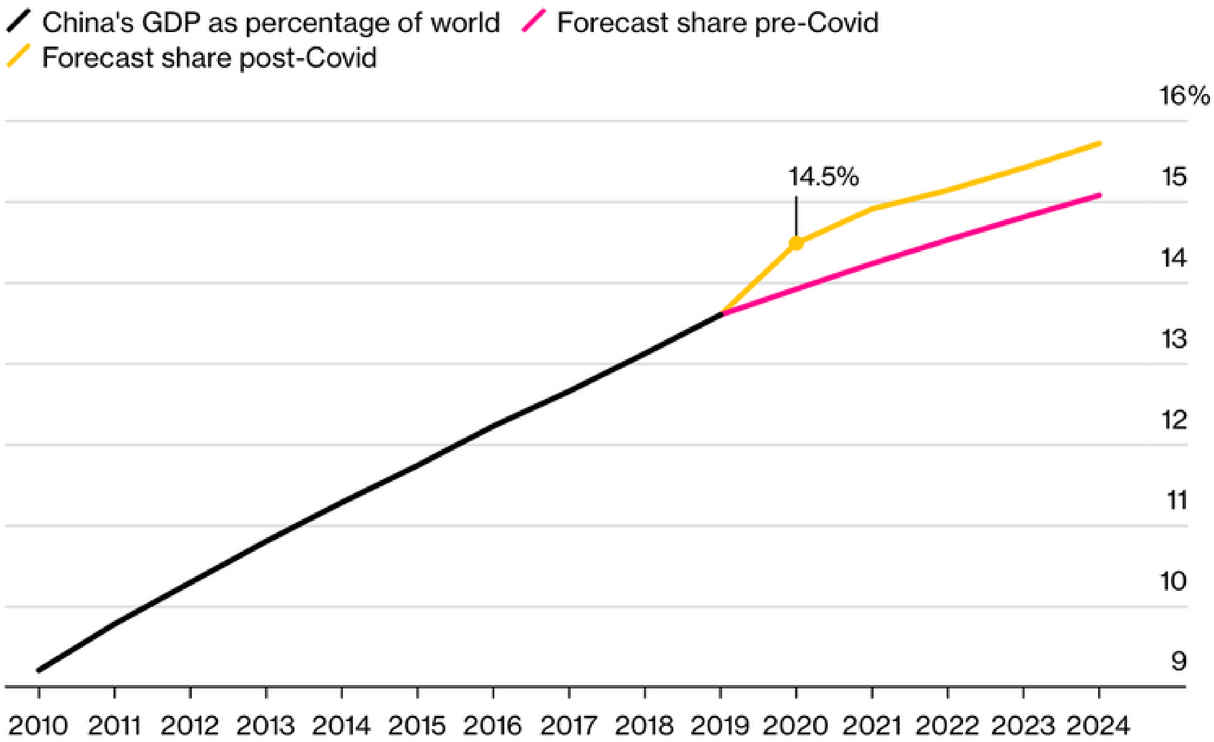
However, structural challenges remain, including demographic decline and **dependence on global demand**. The property crisis, with unpaid debts estimated at at least **$390B** and companies such as Country Garden on the verge of bankruptcy, is exacerbating the already precarious economic situation.

PERFORMANCE OF CHINESE EQUITIES SINCE 2020



Sources: MSCI. Carmignac données au 13/01/2023

https://www.bloomberg.com/news/articles/2021-01-18/china-s-economy-grew-2-3-in-2020-accelerating-global-rise



The graph above shows **China's share of world GDP**. We can see that despite the management of the Covid-19 crisis being widely criticised by certain countries and consultancy firms, experts have **revised Chinese growth upwards**.

With foreign direct investment (**FDI**) **falling** to a **record low** of **$4.9B** in the second quarter of this year, marking an **87%** year-on-year **drop**, the Chinese authorities have taken steps to boost investor confidence. They have relaxed capital rules allowing individual investors and companies in **Shanghai** and **Beijing** to transfer their money freely **in and out of the country**. This initiative is aimed to **attract foreign investors** and compensate the fall in business confidence (particularly due to the current crisis in the Chinese property market).

The country is opening its doors to economic powers such as the United States, France and the United Kingdom, with the aim of **boosting** its **financial market**. The recent **IPO** of **ARM** indicates that technology giants such as Apple and Microsoft, as well as fashion brands such as Nike and Adidas, are likely to invest heavily in China. These companies are looking to **increase** their **control** over the Chinese market, following ARM's example.

https://tokenist.com/china-relaxes-capital-rules-for-foreigners-as-fdi-hits-quarterly-low/
https://www.china-briefing.com/news/china-records-steady-fdi-growth-in-2022/

UK ECONOMIC SITUATION

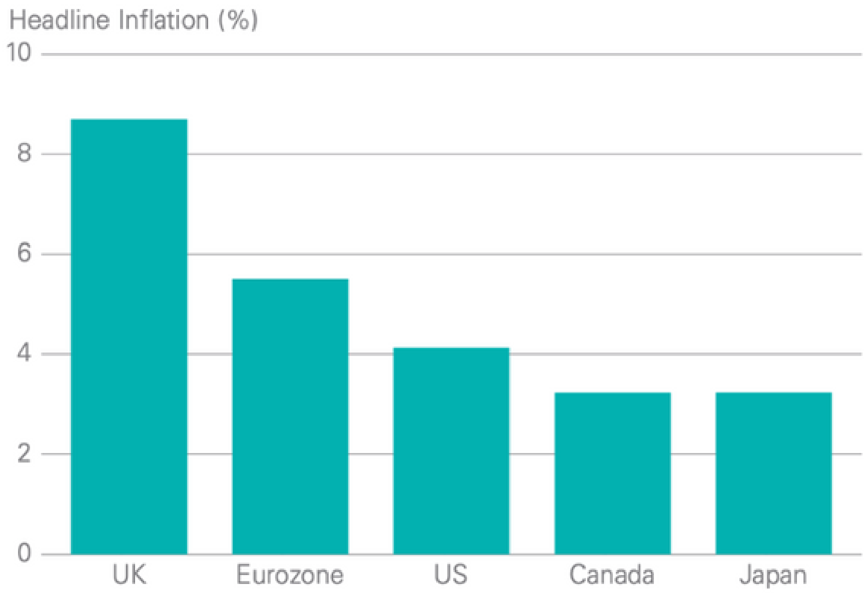
06

The Brexit took place on **February the 1st 2020**, in the middle of the Covid-19 pandemic. What was initially expected to be a breath of fresh air for the British economy turned out to be a **real nightmare**.

According to **Bloomberg**, Brexit is costing the UK around **€124B a year**. Since the Brexit, the UK has lost **0.6% of its GDP** and gained **10.5% in inflation**.

Furthermore, consumer inflation in the UK continues to be the **highest in the G7** (**8.5% in June 2023**). What is even more concerning is that **core inflation**, which excludes volatile energy and food prices, has reached **7.1%**, its **highest level since 1992**.

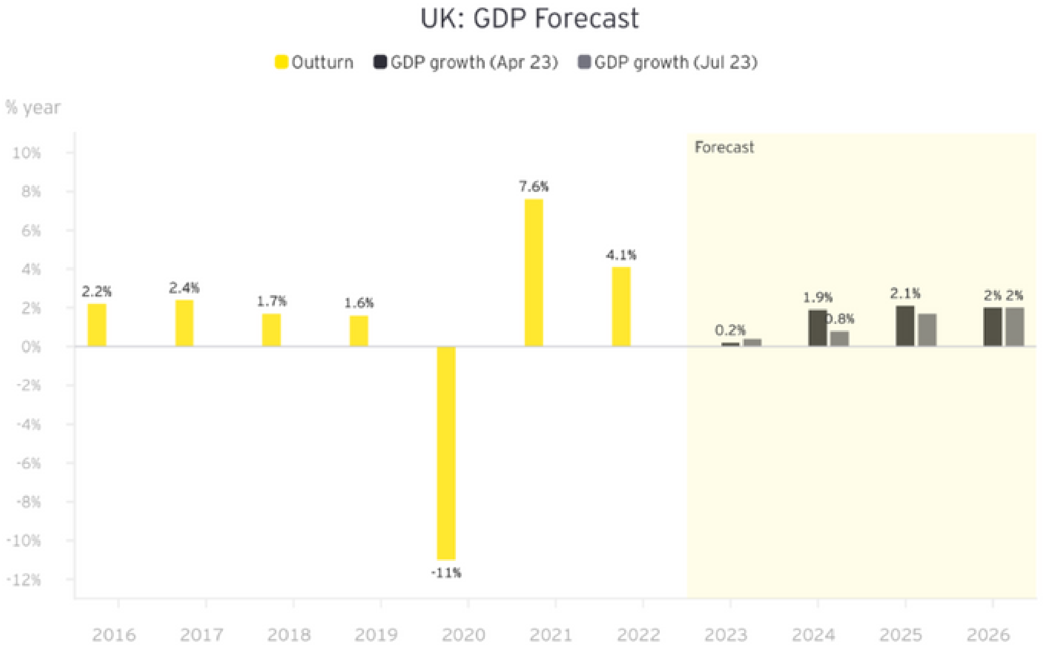
Exhibit 1
Unwanted Leadership – UK Headline Inflation versus Other G7 Economies



As at 30 June 2023
Source: FactSet

https://www.ey.com/en_uk/news/2023/07/rising-interest-rates-downgrade-uk-growth-forecast-for 2024#:~:text=In%20its%20new%20Summer%20Forecast,0.2%25%20growth%20to%200.4%25.
https://tradingeconomics.com/united-kingdom/forecast
https://www.lazardassetmanagement.com/docs/product/-sp8-/1313/LazardOutlook-on-the-United-Kingdom_2021Q4.pdf
https://www.lexpress.fr/monde/europe/brexit-trois-ans-apres-les-5-chiffres-qui-montrent-que-leconomie-britannique-souffre-ETL6ZZD2OBBP7M24LEN3AKDXQE/#:~:text=Selon%20l%27organisme%20public%20de,environ%204%20%25%20à%20long%20terme.

According to Ernst & Young (EY), UK **GDP growth** is expected to **stabilise** soon. Encouragingly, the resilience of the economy since the start of the year has led to an **upward revision** of **forecasts for 2023**, with economic growth now expected to be **0.4%**, compared with **0.2%** forecast in April. The economy remains on track to avoid recession, although **GDP growth** forecasts for 2025 have also been **revised downwards**, from 2.3% to 1.7%.



Source: EY ITEM Club Summer Forecast 2023

As for the stock market, we can see that in the second quarter of 2024 a **decline** of around **7.5%** is expected. Furthermore, it should be noted that the inflation rate is expected to be **2.7%** in the second quarter of **2024**, compared with **6.7% currently**, which represents a **4% fall** in the inflation rate over a one-year period.

Markets	Actual	Q3/23	Q4/23	Q1/24	Q2/24
Currency	1.22	1.21	1.19	1.17	1.14
Stock Market (points)	7683.91	7557	7406	7258	7113
Government Bond 10Y (%)	4.25	4.51	4.66	4.82	4.99

Overview	Actual	Q3/23	Q4/23	Q1/24	Q2/24
GDP Growth Rate (%)	0.20	0.1	0.2	0.3	0.4
GDP Annual Growth Rate (%)	0.40	-0.6	0.1	0.5	0.9
Unemployment Rate (%)	4.30	4.4	4.5	4.7	4.9
Inflation Rate (%)	6.70	6.5	4.9	3.2	2.7

https://www.ey.com/en_uk/news/2023/07/rising-interest-rates-downgrade-uk-growth-forecast-for 2024#:~:text=In%20its%20new%20Summer%20Forecast,0.2%25%20growth%20to%200.4%25.
https://tradingeconomics.com/united-kingdom/forecast
https://www.lazardassetmanagement.com/docs/product/-sp8-/1313/LazardOutlook-on-the-United-Kingdom_2021Q4.pdf
https://www.lexpress.fr/monde/europe/brexit-trois-ans-apres-les-5-chiffres-qui-montrent-que-leconomie-britannique-souffre-ETL6ZZD2OBBP7M24LEN3AKDXQE/#:~:text=Selon%20l%27organisme%20public%20de,environ%204%20%25%20à%20long%20terme.

COMMODITIES MARKET SITUATION 07

The commodities market is a **barometer** of the **global economy**. Reflecting the complex dynamics of supply and demand, geopolitical influences, and technological and environmental changes. In 2023, this market is at a **turning point**, facing unprecedented challenges and opportunities. The commodities market, which was previously shaken, **falling by 20% in 2020** and **rising by 30% in 2021**, is **heavily impacted by geopolitical events** such as the war in Ukraine, tension between the United States and China, the Covid-19 crisis and others.

Metals such as **lithium**, **cobalt** and **copper** are in **high demand**, as they are **essential to the energy transition**. According to Janus Henderson Investors, the price of lithium has risen by more than **70% in 2022**, following a rise of **more than 400% in 2021**. These metals are crucial to the manufacture of batteries, solar panels and wind turbines. Demand for these commodities is fuelled by environmental policies and investment in green technologies.

We will focus our investigations on the following commodities: **Gold**, **metals essential to the energy transition and oil**.

Gold

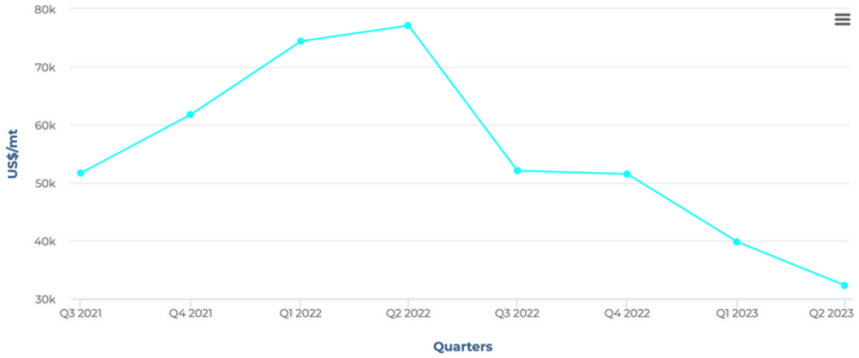
This chart displays Gold (US$/toz) from 2021 to 2023.

Gold is often referred to as the **'eternal currency'** and occupies a central place in the commodities ecosystem. Historically used as a store of value and a medium of exchange, it also serves as a **safe haven in times of economic uncertainty or market volatility**. Unlike other commodities, gold is not only consumed but also stored, making it a unique asset.

Given the volatility of the current market, we will **allocate a proportion** of our total investment to **gold** in our portfolio.

https://www.focus-economics.com/commodities/precious-metals/gold/
https://www.eslsca.fr/blog/le-marche-des-commodities-et-sa-situation-actuelle

Cobalt

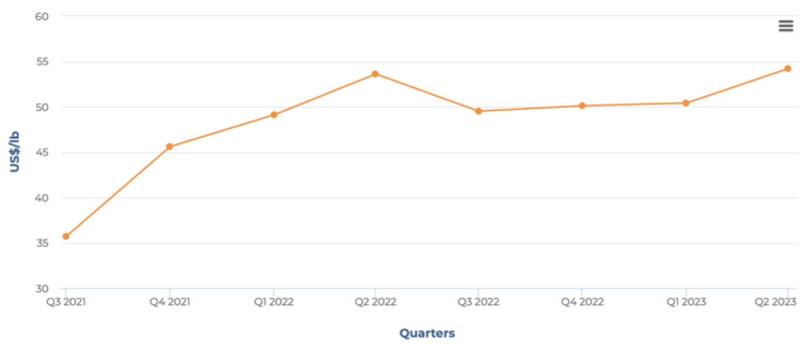


Cobalt is crucial to the manufacture of **lithium-ion batteries**, powering electric vehicles and renewable energies. It is a **key element** in accelerating the ecological transition, making it possible to store clean, sustainable energy.

Copper

Copper is essential for renewable energy technologies such as solar panels and wind turbines, thanks to its high electrical conductivity. **Demand for copper is currently strong**, fuelled by investment in green infrastructure and the energy transition. This is creating a tight market, with prices on the rise.

Uranium

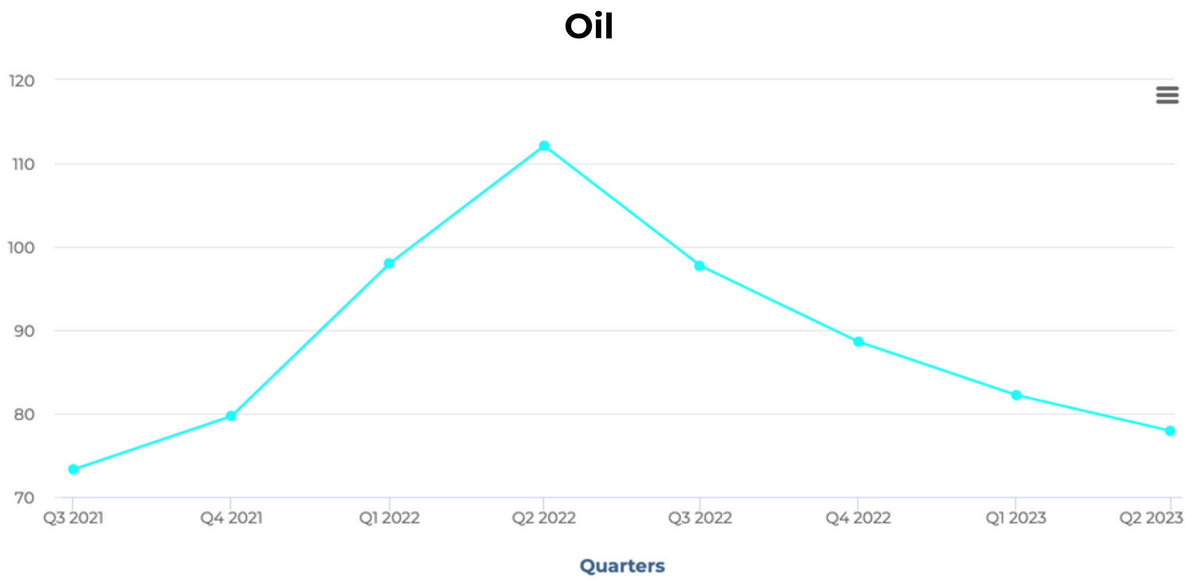


Uranium is the **key fuel for nuclear power**, a low-carbon energy source. In the current context of the fight against climate change, it is gaining in importance as an alternative to fossil fuels. The uranium market is evolving, **with growing demand** driven by the need for **clean, sustainable energy**.

Lithium

Lithium is also a crucial component of **lithium-ion batteries**, which power electric vehicles and energy storage systems. Demand for lithium is rising sharply, driven by the energy transition and environmental policies. As a result prices have risen significantly, making **lithium a major player in the commodities market**.

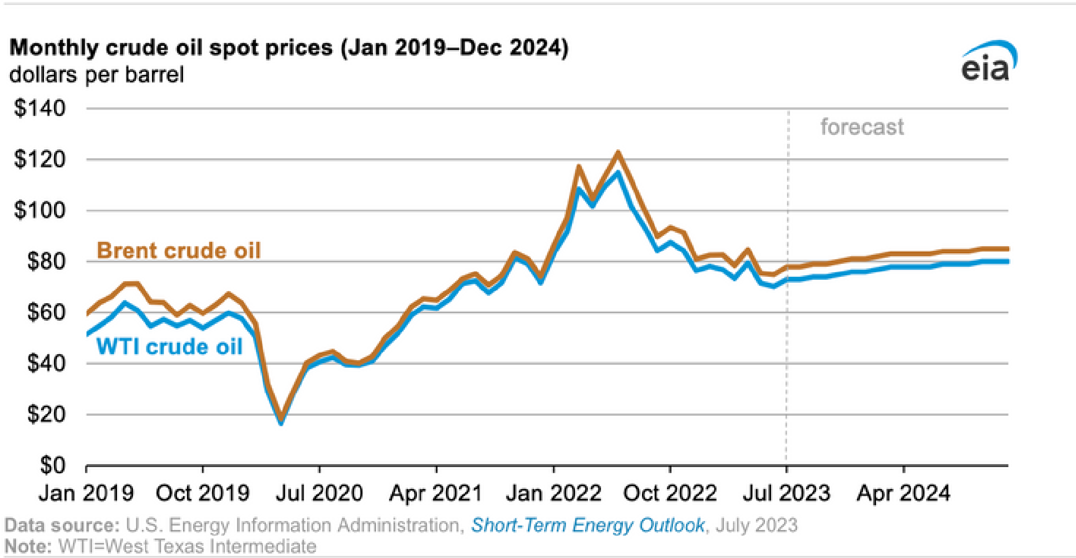
https://fr.finance.yahoo.com/quote/S5L.F/chart?
https://www.focus-economics.com/commodities/precious-metals/gold/



Oil has long been the **lifeblood** of the **global economy.** Powering everything from vehicles to factories and even electricity production. There's no denying that this fossil fuel has **played a central role in industrial and economic development** over the last two centuries. However, in this era of environmental awareness and energy transition, oil finds itself at a crossroads.

On the one hand, it **remains** a **dominant source of energy**, with sustained demand in many sectors. On the other, it is **more and more criticised** for its environmental impact, particularly its carbon emissions, which contribute to climate warming. Increasingly strict regulations and growing social pressure for cleaner alternatives are putting the oil sector under pressure. In the current context, **oil prices are volatile**, influenced by a multitude of factors ranging from **geopolitical tensions** to **fluctuations in demand** due to the Covid-19 pandemic. Some experts even predict a **fall in demand** in the long term, as renewable energies gain ground.

In short, oil is a **complex commodity** facing unprecedented challenges. While it continues to play a significant role in the global economy, its future is uncertain, shaped by environmental issues, technological innovations and geopolitical dynamics.

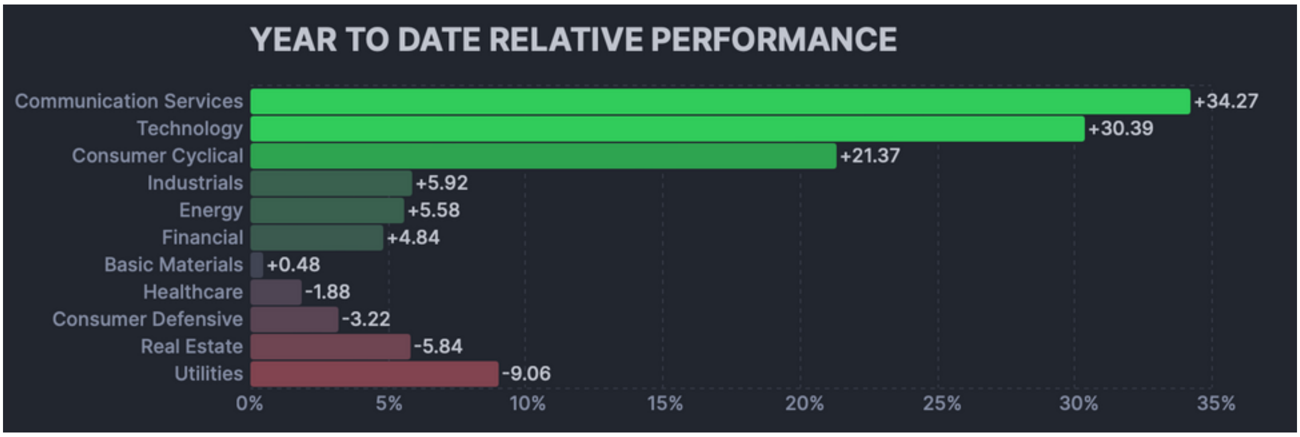


https://www.eia.gov/todayinenergy/detail.php?id=57160
https://www.goldmansachs.com/intelligence/podcasts/episodes/the-impact-of-rising-oil-prices.html
https://www.focus-economics.com/commodities/precious-metals/gold/

MARKET SITUATION WITHIN INDUSTIRES

08

We're now going to analyse the different industry sectors, in particular those that interest us in building our investment strategy. Firstly, the chart below shows the same thing as mentioned earlier. The **technology** and **communications services** sectors are currently driving the US economy. In terms of the sectors that interest us, we will be focusing on the following: **technology**, **healthcare**, **energy** and **real estate**.



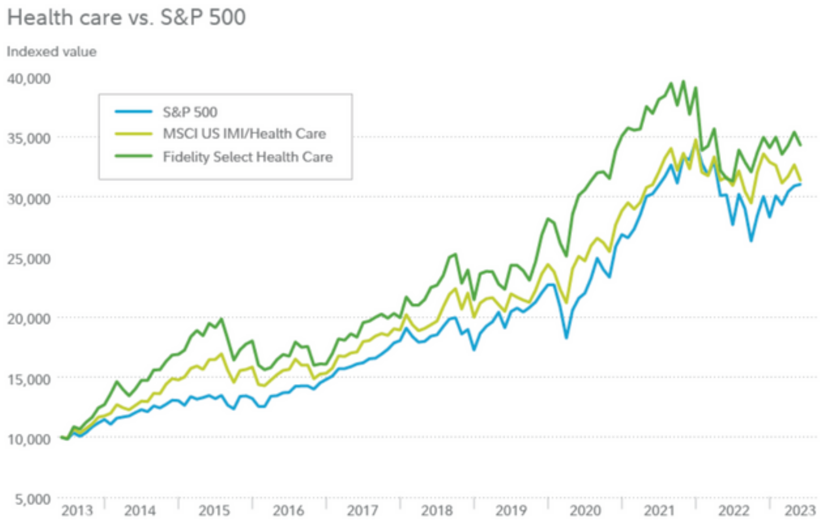
Healthcare industry

Although the healthcare sector ended 2022 in negative performance, it performed **better** than the **S&P500**, posting a **decline of only 4%**.

Since the start of 2023, **healthcare stocks (-1.88%)** have underperformed the **US stock market** as a whole **(+14%)**. This is largely because investors have turned their attention to the higher-growth sectors such as information technology and communications that are currently driving the US economy.

Nevertheless, we believe that the current underperformance of this sector will undergo an **upward correction**. In addition, since the Covid-19 pandemic, the **healthcare sector** has **diversified** and **strengthened** considerably. A number of companies are exploding onto the market, notably **Novo Nordisk**, the Danish pharmaceutical company that recently became the European company with the **highest valuation**, surpassing the French luxury goods giant LVMH.

https://finviz.com/groups.ashx?g=sector&v=210&o=name
https://www.marketwatch.com/story/here-are-the-stocks-to-buy-and-the-ones-to-sell-if-interest-rates-stay-high-says-jefferies-55f32fa9?mod=markets



Source: Fidelity Investments, as of June 25, 2023.

Energy industry

Firstly, it should be remembered that energy is a sector with **limited supply**, but with **demand** that is only set to **increase over the years**. After rising sharply in 2022, the energy market has been taking a breather since the start of 2023. It is currently up by **5.58%** since the start of the year, compared with **17.5%** for the **S&P 500**.

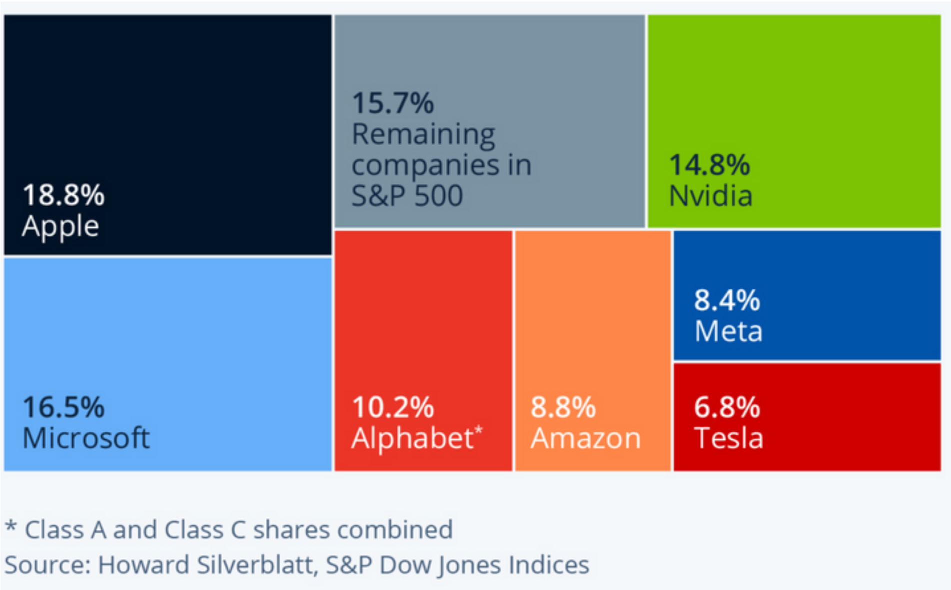
This slowdown is partly due to a simple change in investor preferences, which this year have favoured technology stocks and other sectors. As detailed earlier, the energy sector will undoubtedly benefit from the **ecological transition**, which, whether we like it or not, is approaching and becoming a reality. **Demand for metals** is set to **increase**, and various companies in this sector will be able to take full advantage of this.

We believe that the energy sector is set to perform well in the short to medium term.

Technology industry

The technology sector is the **most volatile** in the market. In fact, it is the one that brings the most innovation worldwide and is constantly evolving. The technology sector is currently the big winner of 2023, with the Nasdaq, for example, posting a year-to-date performance of **43%**.

The technology sector is also highly dependent on trends. The latest trends include **AI**, **semiconductors**, the **Metaverse**, **Web3**, **5g** and the **cryptocurrency universe**. We intend to invest in this area, but we will take a very **cautious approach**.



European real estate industry

The real estate sector is currently losing its so-called **"safe haven"** value. After the **20% fall** recorded since **June 2022**, the company "abrdn" predicts a **further 5.5% fall** in the value of all properties in the year to **June 2024**.

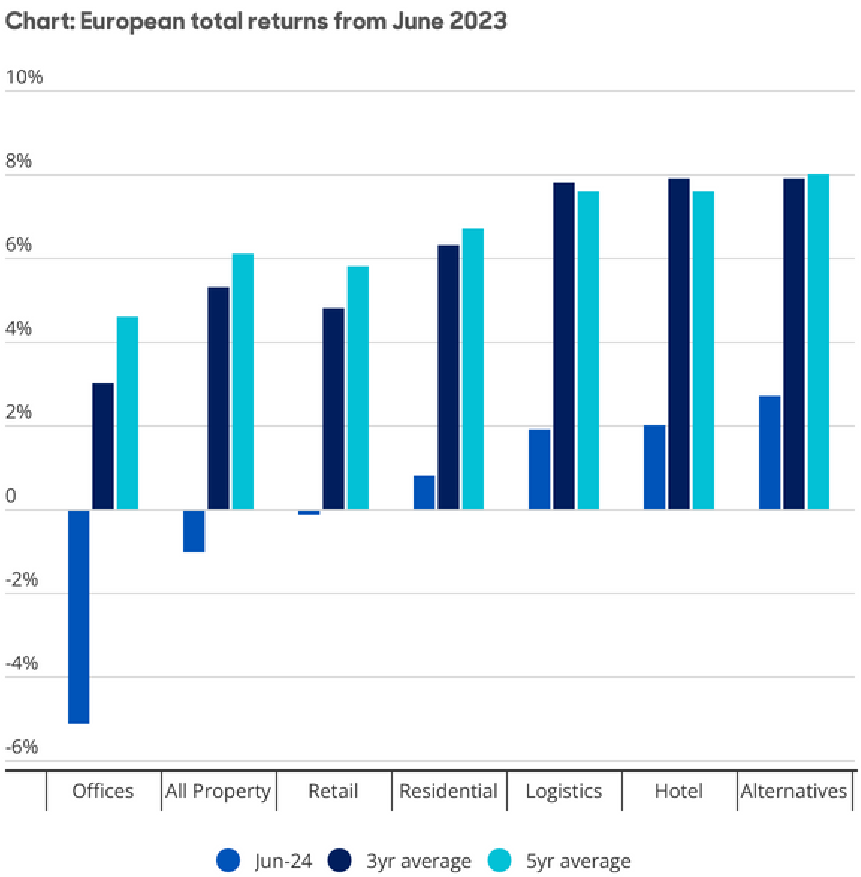
Furthermore, for them "the yield revaluation phase seems closer to the end than the beginning, although the risks of a further decline are higher due to the weakening economic outlook and ongoing debt refinancing difficulties".

https://www.statista.com/chart/30219/main-contributors-to-s-p-500-gains-in-2023/
https://www.nuveen.com/global/insights/real-estate/a-reset-for-european-real-estate-is-underway
https://www.marketwatch.com/story/here-are-the-stocks-to-buy-and-the-ones-to-sell-if-interest-rates-stay-high-says-jefferies-55f32fa9?mod=markets

iShares European Property from mid-2021 to today

If we look at the performance of the **iShares European Property Yield index**, we can see that it has **fallen** by **more than 40%** since mid-2021. There are a number of reasons for this, including the **rise in ECB interest rates**, which are sharply **reducing the profitability of property assets**. According to other specialists, property profitability will fall in the coming years from an average of **4.5%** to **3.5%**, a fall of **22%**.

The property market is a financial market to be watched closely, and we intend to add it to the various types of asset that will make up our portfolio.




PORTOFOLIO
STRATEGY

INVESTOR PROFILE AND INVESTMENT STRATEGY 01

We'll now take a look at our investor profile. Our investment group is made up of two distinct types of investor. Each bringing their own perspectives and risk tolerance. This combination allows us to create a balanced portfolio that meets a wide range of investment objectives.

Young professionals

This sub-group within our investment group is made up of young professionals, often in their late twenties to mid-thirties. They are comfortable with technology, well informed and have a higher risk tolerance. For them, the emphasis is on capital growth and high returns, even if this comes with increased volatility. They are particularly interested in asset classes such as equities, futures and crypto-currencies, which offer the potential for significant gains. These investors are also more inclined to explore emerging markets and disruptive technologies, given their longer investment horizons and appetite for risk. We fully identify with this investor profile, which is why a large part of our portfolio will be based on this type of investor.

Experienced investors

At the other end of the spectrum, we have seasoned investors, often in their forties or older. They have years of investment experience and generally take a more conservative approach. Their primary objective is to preserve their wealth and obtain a stable income, which leads them to favour bonds, ETFs and property investments. They prefer established markets such as the US and the eurozone, where the political and economic landscape is more stable. We see ourselves less in this investor profile, but the current market situation means that we have to take precautions to cope with the high volatility.

To give you a clearer idea of our investor profile, here are a few key facts about us.

Risk tolerance: Moderate to High
Around 65% of the portfolio is invested in assets such as equities, futures and crypto-currencies.

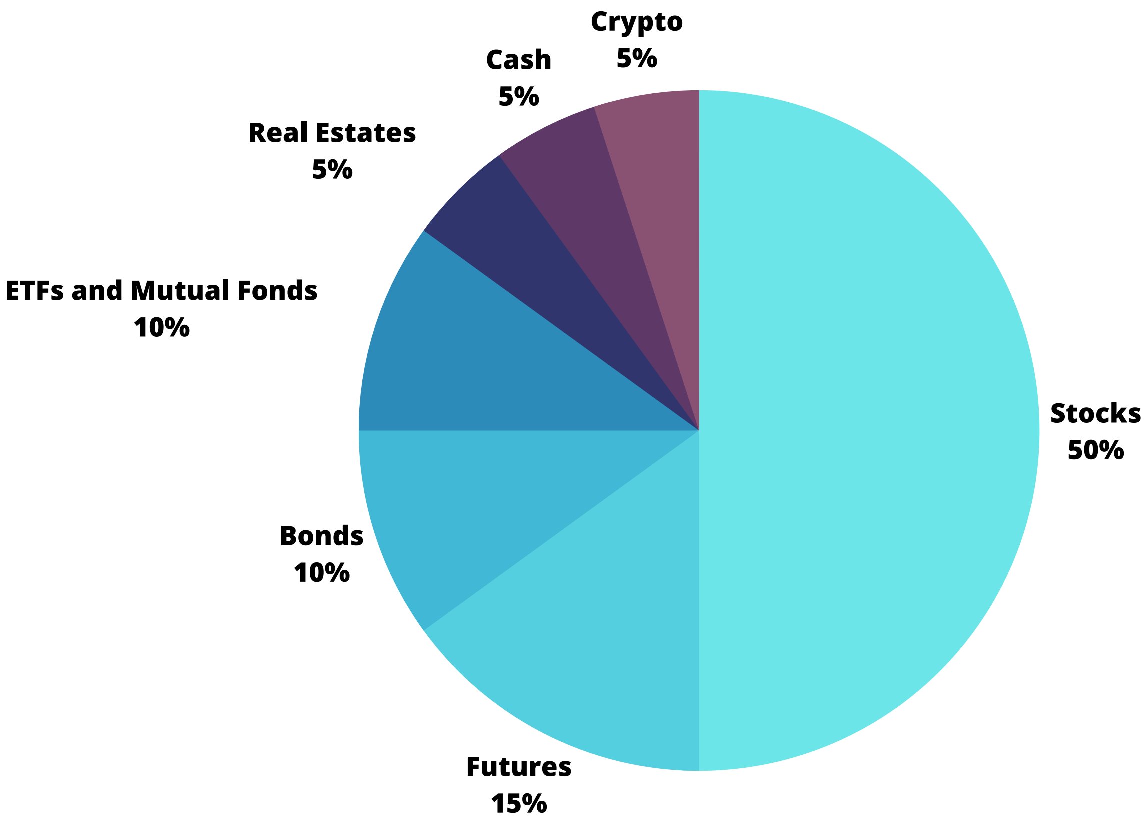
Investment objectives: Capital growth
Approximately 70% Equities, futures and crypto-currencies are clearly focused on capital growth.

Investment horizon: Medium to Long Term
With 45% in equities and 20% in futures, which are generally longer-term investments, we can estimate that the investment horizon is around 7 to 15 years.

Diversification and Security: 10%
Real estate and cash provide a safety cushion and diversification.

Stable Income: 20%
Bonds and ETFs are more focused on generating stable income.

BREAKDOWN OF OUR PORTFOLIO BY ASSET TYPE 02

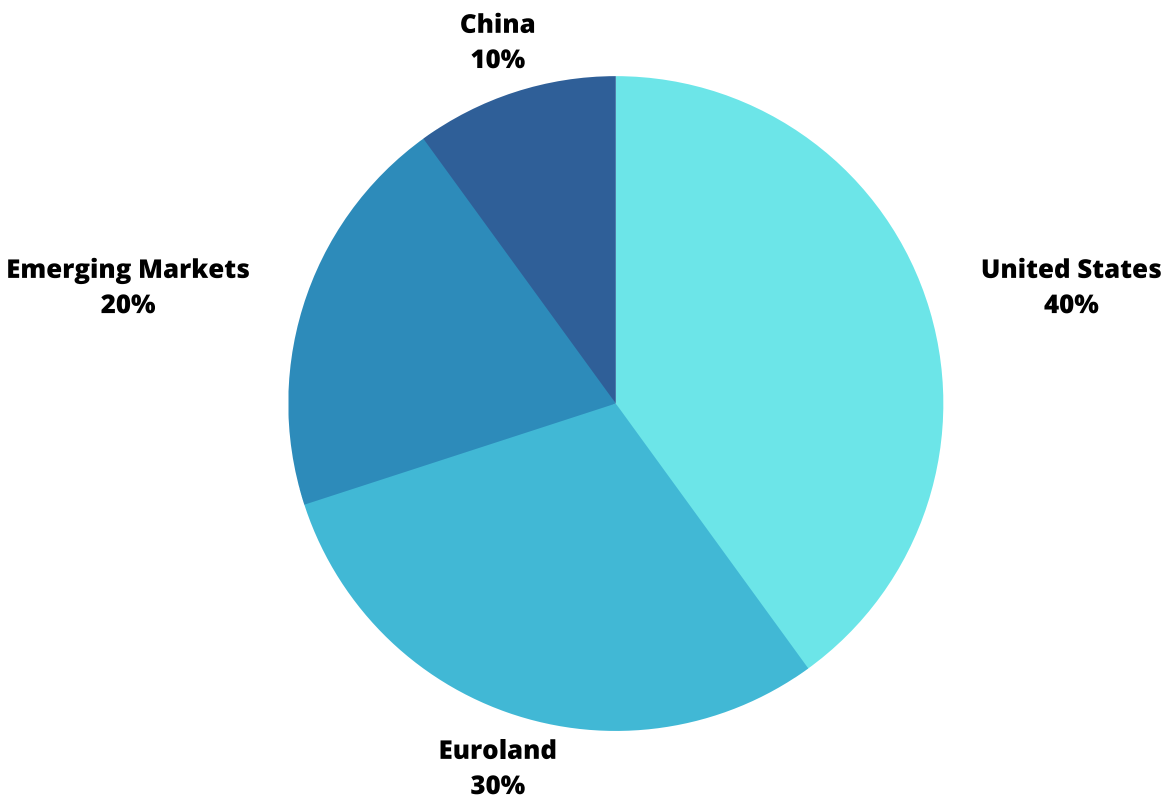


Our portfolio allocation by asset type reflects a carefully calibrated strategy that aims to **balance risk** and **reward**, while offering opportunities for **growth** and **stability**.

With **half** of the portfolio invested in **equities**, the strategy is clearly focused on capital growth. This suggests a relatively high risk tolerance and a long-term investment horizon. Equities offer the potential for high returns, but they are also subject to **significant volatility**. The **15% allocation to futures** is a bold move towards potentially high returns. It adds a layer of complexity and risk to the portfolio, but also the potential for **significant gains**, especially in a bull market. **Bonds** act as a **stabiliser** in this otherwise growth-oriented portfolio. They offer a **fixed income** and are generally **less volatile than equities**, helping to mitigate overall risk. These instruments offer instant diversification and are often less risky than individual equities. They can include a variety of asset classes and sectors, which adds a layer of security and stability. **Real estate** is often seen as a good hedge against inflation and offers additional diversification. At **5%**, it does not dominate the portfolio, but offers relative stability. Keeping a **small reserve of cash** allows flexibility to seize **new investment opportunities** or to cover needs in the event of a market downturn. Although risky, **crypto-currencies** offer the potential for high returns. At **5%**, **exposure is limited**, but sufficient to benefit from any significant gains.

In short, this asset allocation shows a strategy that aims to **maximise returns** while keeping an eye on **stability and diversification**. It's a well thought-out portfolio that seeks to make the most of different market environments.

BREAKDOWN OF OUR PORTFOLIO BY GEOGRAPHICAL LOCATION 03



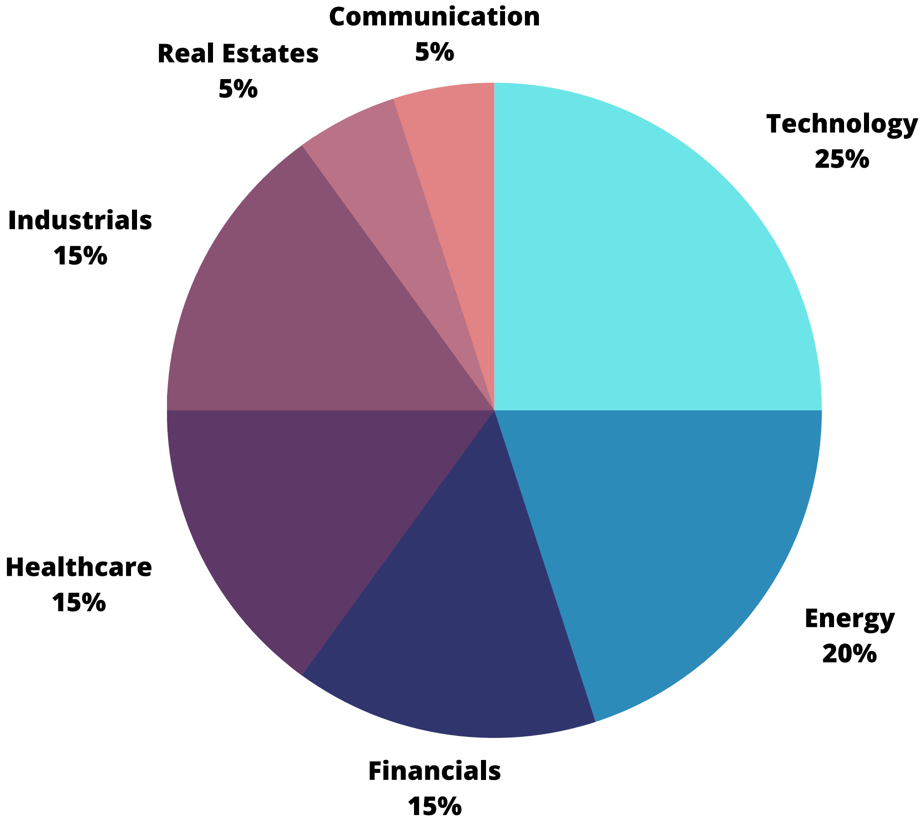
For the **breakdown** of our portfolio by **geographical location**, we chose first the **United States (40%)** because it is one of the largest economies in the world and is home to many **leading international companies**. We will invest in U.S. stocks using index funds (ETFs) such as the **S&P 500**, the **Dow Jones Industrial Average**, and the **NASDAQ Composite** or **individual stocks**. It is currently the world's largest economy, and the one with the greatest impact on financial markets.

Secondly, **Euroland (30%)** is selected for its **economic diversity** and **developed markets**, including countries like the **France**, **Italy,** and **Germany**. This portion aims to benefit from growth opportunities in Europe through indices like the **Euro Stoxx 50**, while spreading risk.

Emerging Markets (20% of our portfolio) is intended to harness the **higher growth potential** of emerging markets such as **Brazil**, **India**, or **Taiwan**, represented by indices like the **MSCI Emerging Markets Index**. Emerging markets come with increased risk but offer attractive yield opportunities.

To finish, **China (10%)** is a rapidly expanding economy with a growing influence on global markets, captured by indices like the **CSI 300**. This allocation targets sectors like **Chinese technology** and **consumption** while further diversifying the portfolio.

BREAKDOWN OF OUR PORTFOLIO BY INDUSTRY SECTOR 04



To begin the allocation of our portfolio by **industry sector**, it is evident to start with technology. Indeed, **25%** of our portfolio is dedicated to this sector in order to take advantage of the **long-term growth** of **technological trends** and innovative companies (which hold a significant position in the financial markets with company such as **Apple**, **Microsoft**, **Alphabet Inc**).

To continue, our portfolio includes a **20%** allocation to the **energy sector**, allowing for diversification and capitalizing on the stability of companies like **ExxonMobil**, while also benefiting from the growth potential of renewable energy companies like **NextEra Energy** in the transition to clean energy. **Financial services**, constituting **15%**, provide exposure to stalwarts like **JPMorgan Chase** and **Goldman Sachs**, which offer stable income and dividend growth. **Healthcare,** also at **15%**, includes companies like **Johnson & Johnson**, known for their consistent demand in pharmaceuticals and medical products. With **15%** allocated to **industrials**, you can profit from **economic growth** with companies like **Boeing**. **Real estate**, representing **5%**, includes investments in companies such as **Realty Income Corporation**, offering stable income through real estate properties. Lastly, a **5%** investment in **telecommunications** provides exposure to companies like **AT&T**, offering essential communication services and relative stability in your portfolio.

GLOBAL ASSET MANAGEMENT
GROUP F

OUR STOCK POSITIONS

Doriane Duteil, Océane Rozniatowski, Titouan Clément, Basile Arthaud, Hugo Moissonnier, Charles Milliand, Charles Blethon.

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STOCK EXCEL

First of all, let's talk about our strategy. At the heart of our global asset management strategy is the search for intelligent diversification that maximises returns while minimising risk. With this in mind, we have carefully selected two positions that align with our global approach. Our choice to take a **long position** in **NVIDIA Corporation** and a **short position** in **Meta Platforms, Inc.** is the result of our careful research and analysis. These choices are consistent with our strategy, as they reflect our desire to combine assets that offer differential return prospects while balancing our market exposure. In the sections to come, we will develop our reasons for these choices, providing a full and detailed analysis.

LONG POSITION 01

NVIDIA

NVIDIA is a leading American technology company renowned for its expertise in **graphics processing units** (GPUs) and **artificial intelligence**. It is widely recognized for its contributions to the **gaming industry**, **data center solutions**, and **AI applications**.

January 2022 - January 2023 ($ in millions)

Net sales	**26,974**
Net Income	**4,368**
Total Assets	**41,182**
Total Liabilities	**19,081**
Total Equity	**22,101**

Return on sales: 32%
Total asset Turnover: 0.79
Equity Multiplier: 1.89
Return on equity: 47%
Operating Cash Flow: $25.3B
Free Cash flow: $25.3B
Credit ranking: A-
Market Capitalization: $1,122B

Microsoft

Microsoft is a prominent American technology corporation, highly regarded for its software products, including the **Windows operating system, Office Suite**, and **cloud services such as Azure**. It is a diversified company with a substantial presence in various tech-related sectors, providing software, hardware, and cloud solutions worldwide.

June 2022 - June 2023 ($ in millions)

Net sales	**211,915**
Net Income	**72,361**
Total Assets	**411,976**
Total Liabilities	**205,573**
Total Equity	**206,223**

Return on sales: 34%
Total asset Turnover: 0.51
Equity Multiplier: 2.00
Return on equity: 35%
Operating Cash Flow: $87.6B
Free Cash flow: $59.5B
Credit ranking: AAA
Market Capitalization: $2,434B

Comparing NVIDIA to Microsoft, both companies exhibit strong financial performance, with **Microsoft** boasting a **34% return on sales** compared **to NVIDIA's 32%.** Microsoft, however, appears to have a less efficient **asset turnover** of **0.51**, whereas **NVIDIA's** is **0.79**. In terms of leverage, Microsoft has a higher **equity multiplier** of **2.00**, indicating greater reliance on debt for asset financing, while **NVIDIA's is 1.89**.

Microsoft's r**eturn on equity** stands at **35%**, slightly lower than **NVIDIA's 47%**. In **liquidity,** Microsoft outperforms with an impressive **$87.6 billion** in **operating cash flow** and **$59.5 billion** in free cash flow. Additionally, Microsoft holds the highest AAA credit ranking, signifying exceptional creditworthiness. In terms of **market capitalization**, Microsoft is significantly larger at **$2.434 trillion**, dwarfing **NVIDIA's $1.122 trillion**. These data points reflect the financial strength and market positions of both companies, with Microsoft's larger size and diverse operations counterbalanced by NVIDIA's slightly higher return on sales and more efficient asset utilization.

	Nvidia	Microsoft
Market Capitalization	1 160 000	2 460 000
MC/FCF	45,79	41,36
PE=Stock Price/EPS	109,56	34,13
Operating Cash Flow=4 quarters	25 332	87 582
Capital Expenditures=4 quarters	-	28 107
Free Cash Flow	25 332	59 475
Share Buybacks=4 quarters	-	22 242
Dividends Paid=4 quarters	397	69 593
Return to Shareholders	397	91 835
Cash & Equivalents & STI=last quarter	13 296	111 262
Investments & Advances=last quarter	299	9 879
Portfolio Assets=last quarter	13 595	121 141
Dividend Yield	0,03%	0,9%
Estimated Growth Rate Current year	223,10%	11,90%
Estimated Growth Next year	58,10%	15,00%
Estimated Growth Next 5 years	78,70%	14,44%
ERR Current year	223,13%	12,80%
ERR Next year	58,13%	15,90%
ERR Next 5 years	78,73%	15,34%
Risk Free Rate=Krf	3,91%	3,91%
Equity Market Premium=KM-Krf	5,86%	5,86%
Beta	1,76	0,90
RRR=Required Rate of Return	14,20%	9,19%
ERR-RRR Current year	208,93%	-1,40%
ERR-RRR Next year	43,93%	1,70%
ERR-RRR Next 5 years	64,53%	1,14%
Sales=Total Revenue=4 quarters	32 681	211 915
Net Income=4 quarters	10 325	72 361
Total Assets=last quarter	41 180	411 976
Total Liabilities=last quarter	19 081	205 753
Total Owner's Equity=last quarter	22 101	206 233
ROS=Return on Sales=NI/Sales	32%	34%
TAT=Total Asset Turnover=Sales/TA	0,79	0,51
EM=Equity Multiplier=TA/TOE	1,86	2,00
ROE=Return on Equity=NI/TOE	47%	35%
Debt/Assets=TL/TA	46%	50%
S&P Credit Rating	A-	AAA
Employees	26 196	221 000
Revenue/Employee	$ 124 756	$ 95 889
Ni/Employee	$ 39 414	$ 32 743
Analysts Recommendation	1,13	1,26
Group Recommendation	Buy	Hold

MARKET CAP AND OTHERS

It can be seen that **Microsoft** has a **higher market capitalisation** than **Nvidia**. The **MC/FCF** ratios are **similar** for both companies, indicating a similar premium for future cash flows. However, **Nvidia** has a **much higher PE ratio** (109.56) than **Microsoft** (34.13), suggesting a **potential overvaluation**.

Recommendation: **Hold Nvidia**, but watch for overvaluation. **Buy Microsoft** for its stronger market capitalisation and relatively more favourable valuation.

CASH FLOW

Operating cash flow and free cash flow are significantly higher for Microsoft. Nvidia did not provide capital expenditure data. On the basis of this data, **Microsoft has a stronger financial performance than Nvidia**. We therefore recommend **holding Nvidia** and **buying Microsoft**.

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Revenue/Employee	$ 124 756	$ 95 889
NI/Employee	$ 39 414	$ 32 743
Analysts Recommendation	1,13	1,26
Group Recommendation	Buy	Hold

TEAM POSITION

Having analysed the financial data, it is clear that Nvidia, although smaller in size than Microsoft, has impressive forecast growth and comparable operating profitability. With **5-year forecast growth** of **78.70%** and **a return on sales** of **32%,** Nvidia demonstrates not only **high growth potential**, but also an ability to effectively **maximise profits**. These factors combined have led the team to position the stock favourably and to recommend a "buy" for **Nvidia.**

RETURN TO SHAREOLDERS

Microsoft has been **actively buying back its shares**, which can support its share price and signal a commitment to shareholder value creation. Microsoft's dividend payout is **significantly higher** than Nvidia's, offering a more attractive return to investors. Microsoft has a more robust return to shareholders, reflecting its **aggressive earnings distribution strategy**.

POTENTIAL GROWTH

Based on the financial data provided, Microsoft offers a more attractive **Dividend Yield of 0.9%** compared to Nvidia's **0.03%,** suggesting a better dividend yield for investors. However, Nvidia has an impressive **5-year forecast growth** of **78.70%**, significantly higher than Microsoft's **14.44%**, indicating strong growth potential for Nvidia. However, **Nvidia's high ERR** also suggests **higher risk**. In conclusion, Nvidia appears to be an attractive option for growth-oriented investors, while Microsoft may be preferred by those seeking stability and a reliable dividend yield.

SALES AND PROFITABILITY

Comparing Nvidia to Microsoft on the basis of **sales and revenue**, Microsoft dominates by a wide margin in terms of sales. However, Nvidia manages to compete in terms of profitability, posting a return on sales almost equivalent to that of Microsoft. While Microsoft's financial stature is evident, with far greater assets and liabilities, the proportion between the two is similar at Nvidia, indicating similar financial management. So, while Microsoft is a giant in terms of revenues, Nvidia demonstrates remarkable efficiency in its operational profitability.

SHORT POSITION 02

Meta

Meta, formerly known as **Facebook**, Inc., is a **technology company** led by **Mark Zuckerberg**. It is renowned for its dominance in the realms of **social media and virtual reality**. The company's ambitious vision revolves around the creation of a **metaverse**, an **interconnected virtual realm**, aimed at fostering immersive and interactive experiences in the digital world.

2022 ($ in millions)

Net sales	**116,609**
Net Income	**23,200**
Total Assets	**185,727**
Total Liabilities	**60,014**
Total Equity	**125,713**

Return on sales: 19%
Total asset Turnover: 0.58
Equity Multiplier: 1.00
Return on equity: 11%
Operating Cash Flow: $91.21B
Free Cash flow: $59.73B
Credit ranking: AA-
Market Capitalization: $809.74B

Google

Google, co-founded by **Larry Page** and **Sergey Brin** in 1998, is a tech giant celebrated for its **search engine** and **extensive internet services**. It has ventured into diverse fields, from **mobile operating systems (Android)** to **cutting-edge technologies** like AI and self-driving cars. Google's innovations have had a profound impact on the tech industry.

2022 ($ in millions)

Net sales	**282,836**
Net Income	**59,972**
Total Assets	**411,976**
Total Liabilities	**109,120**
Total Equity	**256,144**

Return on sales: 21%
Total asset Turnover: 0.76
Equity Multiplier: 1.86
Return on equity: 30%
Operating Cash Flow: $99.14B
Free Cash flow: $71.1B
Credit ranking: AA+
Market Capitalization: $1,738B

Meta and Google, two tech giants in the industry, show distinct financial metrics in their recent data. While **Meta** has a **Return on Sales** of **19%**, **Google** outperforms it with a higher **21%**. In terms of asset efficiency, Google also leads with a **Total Asset Turnover** of **0.76** compared to Meta's **0.58**. Equity Multiplier, on the other hand, favors Meta, as it maintains a lower value at **1.00**, while Google's is **1.86**.

Return on Equity significantly favors Google at **30%** compared to Meta's **11%**. Both companies exhibit strong **Operating Cash Flow**, with Google at **$99.14B** and Meta at $**91.21B. Free Cash Flow** follows a similar pattern, with Google generating **$71.1B** and Meta at **$59.73B**. In credit ranking, Google holds an advantage with an **AA+ rating**, while Meta stands at **AA-**. Market Capitalization also reflects the contrast, with Google at $**1,738B** and Meta at **$809.74B.**

When evaluating their financial performances and market positions, Google emerges as the more robust performer with higher returns and credit rating, along with a larger market capitalization.

	Meta	Google
Market Capitalization	810 720	1 740 000
MC/FCF	13,57	24,47
PE=Stock Price/EPS	37,26	29,07
Operating Cash Flow=4 quarters	91 210	99 142
Capital Expenditures=4 quarters	31 476	28 048
Free Cash Flow	59 734	71 094
Share Buybacks=4 quarters	23 380	60 325
Dividends Paid=4 quarters	-	-
Return to Shareholders	23 380	60 325
Cash & Equivalents & STI=last quarter	53 446	118 332
Investments & Advances=last quarter	59	31 224
Portfolio Assets=last quarter	53 505	149 556
Dividend Yield	0,0%	0,0%
Estimated Growth Rate Current year	56,10%	24,10%
Estimated Growth Next year	24,20%	18,60%
Estimated Growth Next 5 years	31,83%	18,40%
ERR Current year	56,10%	24,10%
ERR Next year	24,20%	18,60%
ERR Next 5 years	31,83%	18,40%
Risk Free Rate=Krf	3,91%	3,91%
Equity Market Premium=KM-Krf	5,86%	5,86%
Beta	1,21	1,06
RRR=Required Rate of Return	11,00%	10,12%
ERR-RRR Current year	41,90%	9,90%
ERR-RRR Next year	10,00%	4,40%
ERR-RRR Next 5 years	17,63%	4,20%
Sales=Total Revenue=4 quarters	120 523	289 531
Net Income=4 quarters	22 705	60 963
Total Assets=last quarter	206 668	383 044
Total Liabilities=last quarter	72 655	155 903
Total Owner's Equity=last quarter	206 233	206 233
ROS=Return on Sales=NI/Sales	19%	21%
TAT=Total Asset Turnover=Sales/TA	0,58	0,76
EM=Equity Multiplier=TA/TOE	1,00	1,86
ROE=Return on Equity=NI/TOE	11%	30%
Debt/Assets=TL/TA	35%	41%
S&P Credit Rating	AA-	AA+
Employees	83 553	174 014
Revenue/Employee	$ 144 247	$ 166 384
NI/Employee	$ 27 174	$ 35 033
Analysts Recommendation	1,20	1,38
Group Recommendation	Sell	Hold

MARKET CAP AND OTHERS

Google has a much larger **market capitalisation** than Meta, reflecting its dominant market position. However, **Meta's MC/FCF ratio** suggests a possible undervaluation in comparison to Google. Although **Google's P/E** ratio is **more favourable**, indicating a better valuation based on **earnings**, the mixed metrics of the two companies make the investment choice less clear-cut, requiring a more detailed analysis.

CASH FLOW

Both **Google** and **Meta** generate strong operating cash flows**, but Google has a free cash flow advantage**, indicating a strong financial position. However, **Meta's higher capital expenditure** could signal increased investment in expansion or long-term assets. In summary, while **Google** has a more **favourable net cash position**, Meta is actively investing for the future.

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Market Capitalization	810 720	1 740 000
MC/FCF	13,57	24,47
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Debt/Assets=TL/TA	35%	41%
S&P Credit Rating	AA-	AA+
Employees	83 553	174 014
Revenue/Employee	$ 144 247	$ 166 384
NI/Employee	$ 27 174	$ 35 033
Analysts Recommendation	1,20	1,38
Group Recommendation	Sell	Hold

TEAM POSITION

Recently, Meta has faced a number of notable **challenges**. Privacy concerns, controversies around the spread of misinformation, and criticism of the i**mpact of its platforms** on the **wellbeing of young people** have attracted negative attention. These factors, combined with growing regulatory concerns and fierce competition in the social media market, have created an **uncertain environment** for the company. Although Meta has enjoyed a recent surge, the overall technology market is showing signs of instability. After a thorough analysis of these factors, the team decided that the risk was too high in relation to the potential reward. As a result, the decision was made to short Meta.

RETURN TO SHAREOLDERS

Meta and Google have a similar approach to shareholder returns. Meta carried out **share buy-backs** to the value of **$23,380M**, while Google also favoured share **buy-backs**, reaching **$60,325M**, without paying dividends. In addition, although Meta has a portfolio of assets worth **$53,505M**, Google surpasses it with **$149,556M**. In short, both Google and Meta seem to favour share buybacks as a means of returning cash to shareholders, but Google does so on a much larger scale while having a more robust portfolio of assets.

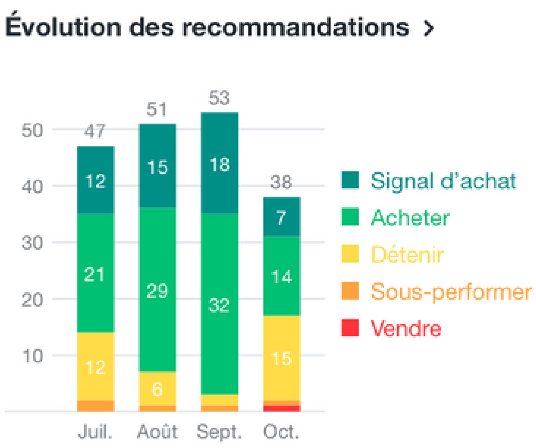
POTENTIAL GROWTH

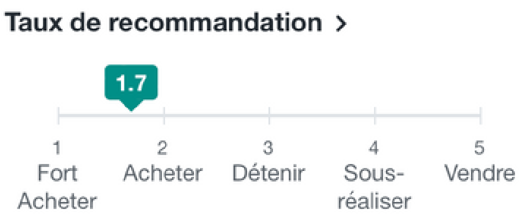
Meta has greater growth potential than Google, with a current estimated **growth rate** of **56.10%** compared with **24.10%** for Google, and a five-year projection of **31.83%** compared with **18.40%**. While Google is maintaining stable growth, Meta stands out for its faster growth forecasts in the short and medium term.

SALES AND PROFITABILITY

If we compare Meta and Google in terms of **sales volume**, Google is in the lead and sells a lot more. However, if we look at how each company turns those sales into profits, something interesting happens. Meta, despite selling less, is almost as good as Google at turning sales into profit. This means that for every item or service it sells, Meta manages to keep its costs down and make money. So while Google may seem more important because of its higher sales, Meta does an excellent job in terms of efficiency and profitability.

ANALYST RECOMMENDATION





To understand how the recommendation rate is calculated, we will use the weighted average method. We'll give each category a value that will increase its weight in the final calculation.

Strong Buy: 1
Buy: 2
Hold: 3
Underperform: 4
Sell: 5

We will then count the number of analyst opinions by multiplying them by their weight.

Buy signal: 7 * 1 = 7
Buy: 14 * 2 = 28
Hold: 15 * 3 = 45
Underperform: 1 * 4 = 4
Sell: 1 * 5 = 5

We then add up all the products:

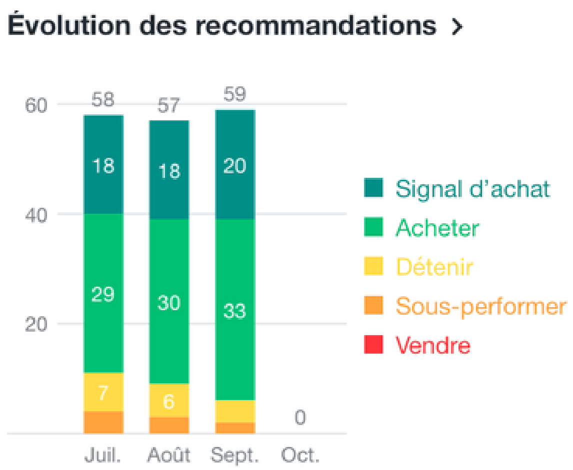
7 + 28 + 45 + 4 + 5 = 89

We then divide the sum by the total recommendations to obtain the average:

89 ÷ 38 = 2.34

There appears to be a difference between the recommendation rate displayed (1.7) and the one calculated here (2.34) based on the October data provided. It is possible that the method used to derive the recommendation rate differs from the one I have explained, or that other factors or months have been included in the overall calculation of the recommendation rate.

ANALYST RECOMMENDATION



To understand how the recommendation rate is calculated, we will use the weighted average method. We'll give each category a value that will increase its weight in the final calculation.

Strong Buy: 1
Buy: 2
Hold: 3
Underperform: 4

We will then count the number of analyst opinions by multiplying them by their weight.

Buy signal: 20* 1 = 20
Buy: 33 * 2 = 66
Hold: 4 * 3 = 12
Underperform: 2 * 4 = 8

We then add up all the products:

20 + 66 + 12 + 8 = 106

We then divide the sum by the total recommendations to obtain the average:

106 ÷ 59 = 1.796 = 1.8

STOCK VALUATION

FCFF/WACC-G VALUATION 01

In order to to the calculation of the growth rate, we will use the following formula:

Intrinsic Value=WACC/(g-FCFF)

To find the growth rate, we will need to rearrange the formula to obtain the following one:

g=WACC−(FCFF per share/Intrinsic Value per share)

Using our Excel Stock and the data available on the Guru Focus website, we can list the following value below:

FCFF: $4.14
WACC: 0.1676
Intrinsic Value per share: $42.54

Now we will calculate g:

g=0.1676−(4.14/42.54)
g=0.1676−0.0973
g=7.03%

NVIDIA's calculated growth rate of **7.03%** means that the company's cash flow (money coming in) should grow at that rate every year indefinitely, contributing to its estimated intrinsic value of **$42.54 per share**. In simpler terms, investors expect NVIDIA to continue to make money year on year, at a constant rate of 7.03%, helping to justify its share value. This positive outlook may be due to expectations of new products, market gains or other beneficial business moves from NVIDIA.

SHAREHOLDER CREATION & BETA 02

This graph shows that over the last 12 months, NVIDIA's share price has **increased by a remarkable 100%**, doubling in value in the space of a year. In comparison, its competitor, Microsoft, has only seen **modest growth of around 8%**, highlighting NVIDIA's significant increase over Microsoft, a long-established company in the market.

It is also worth noting that these two stocks outperformed the **S&P 500** over the same period, while the S&P 500 itself fell by around **3.5%.** This indicates that NVIDIA and Microsoft **outperformed** the overall market represented by the S&P 500, reflecting the robustness of the sector in which they operate. This can also be seen as a positive sign for the future of the industry.

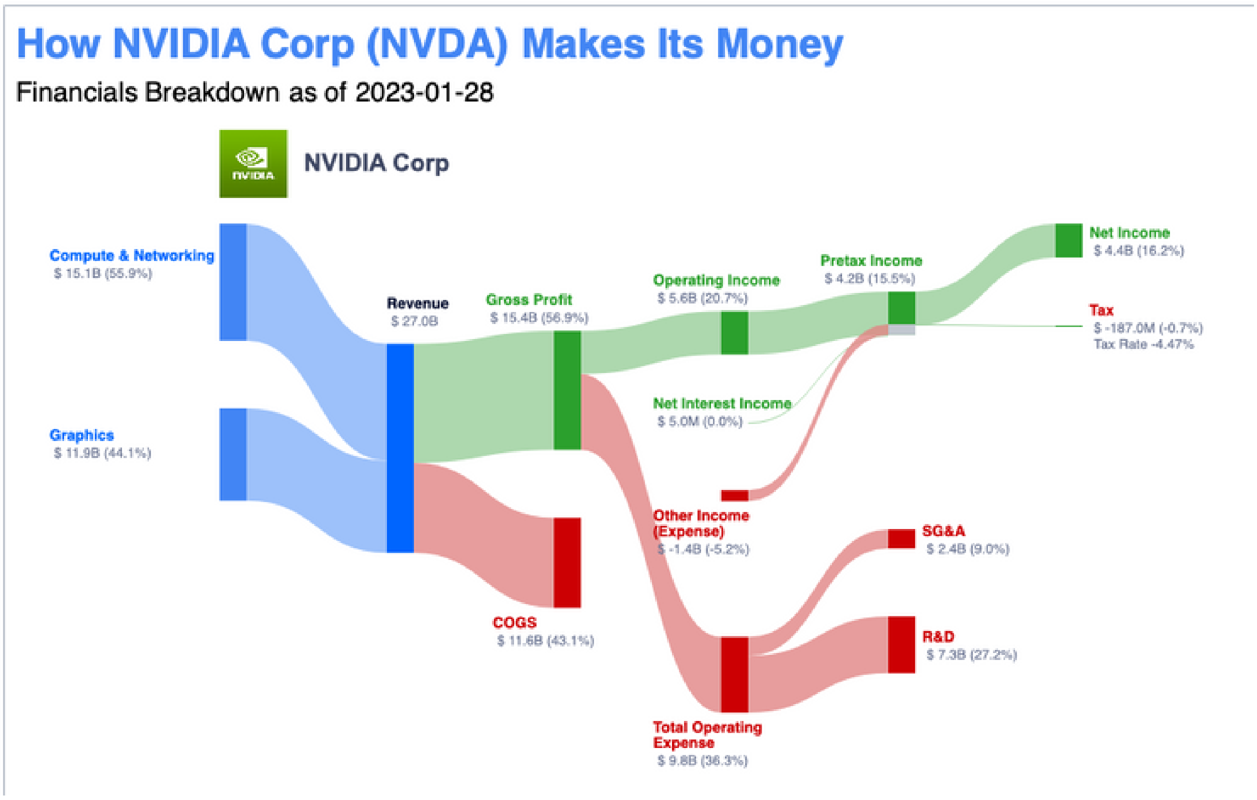
BETA

First of all, before discussing beta in more detail and comparing it with the two assets we have selected, let's start by explaining why investors use it to analyse the potential performance of their assets.

Beta is a **key indicator** of an asset's volatility relative to its benchmark market. Investors look to beta to understand how a specific asset reacts to market movements. A beta above 1 indicates that the asset is more volatile than the market, while a beta below 1 suggests less volatility. By using this indicator, investors can better measure their return expectations against the level of risk they are prepared to accept and against the health of the market as a whole.

In our case, **Nvidia's Beta** is **1.76**. This means that if we assume that the reference market and Nvidia and/or the overall market are on an **uptrend**, then Nvidia, as its Beta indicates, will outperform the market. To be precise, the stock will outperform the market by **76%**. If the market were in a downtrend, then the trend would be reversed, with Nvidia being beaten by the market and losing around 76% against it.

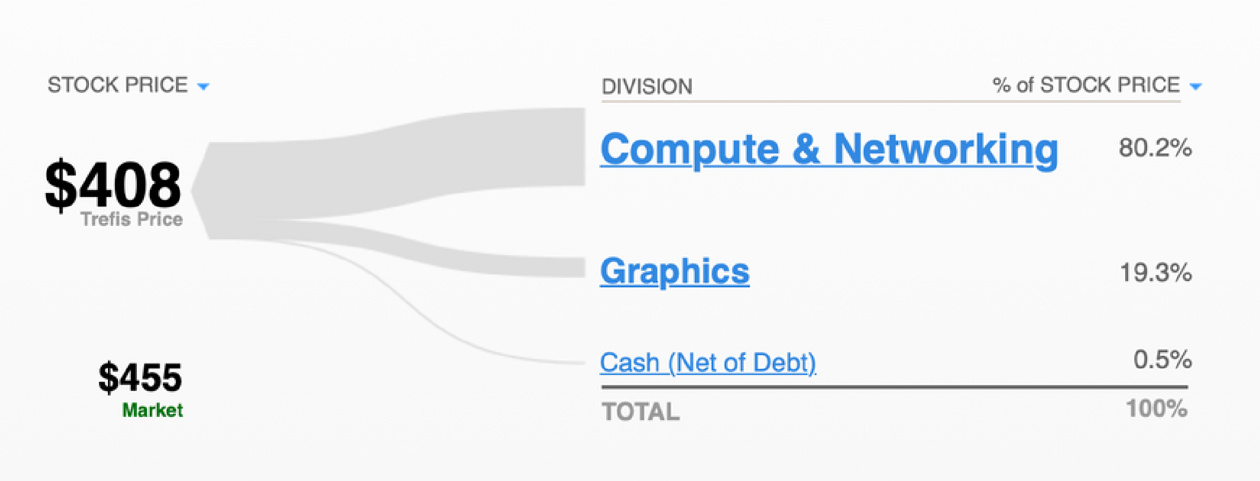
EARNINGS MAP

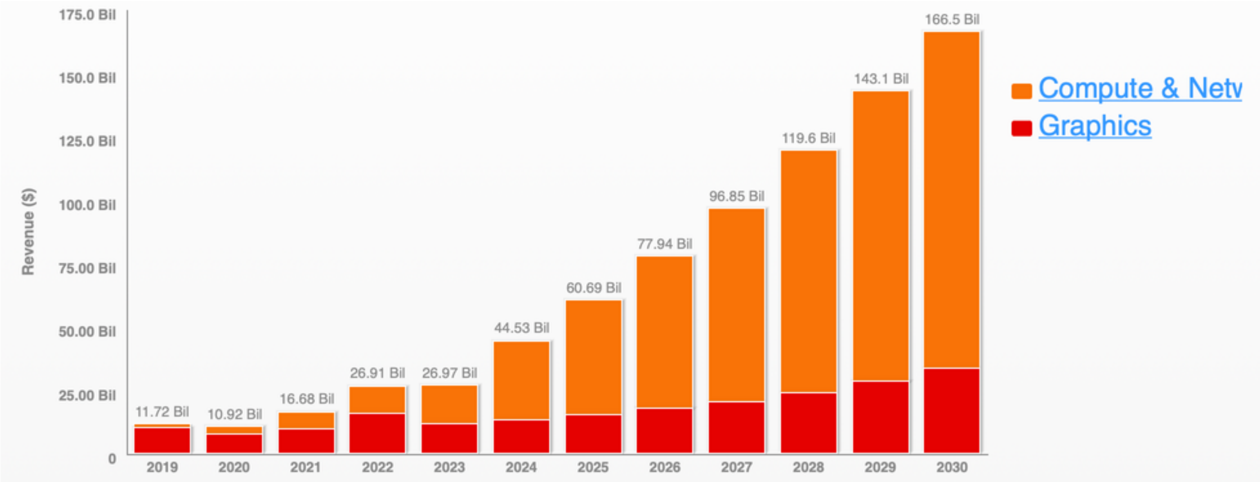


What business segments drive the company's revenues, gross profit, free cash flow and therefore stock price today ?

The main revenue drivers for NVIDIA are the **"Compute & Networking"** and **"Graphics"** segments. "Compute & Networking' probably reflects the **strong demand** for **cloud infrastructure** and **artificial intelligence**, while 'Graphics' underlines the importance of their graphics solutions for **gaming and visual creation**. These two segments, combined with a significant profit margin, have a positive influence on free cash flow and, consequently, on NVIDIA's share price.

EARNINGS MAP





what business segments drive the company's revenues, gross profit, free cash flow and therefore stock price in the future ?

The "Compute & Networking" segment is clearly the main growth factor in the company's share price, accounting for **80.2%** of the market value. Looking at the revenue trend on the bar chart, we can see that "Compute & Networking" is showing **robust growth year after year**, underlining its growing importance to the company. On the other hand, the "Graphics" segment, although less dominant with **19.3%** of the market value, also plays a significant role, showing a stable increase in revenues over time.

The small portion attributed to "Cash (Net of Debt)" at 0.5% suggests that, although cash net of debt is important, it has a **minimal influence** on **market valuation** compared with the two main business segments.

In conclusion, going forward, **Compute & Networking** is likely to continue to drive revenues, gross profit, free cash flow and, therefore, the share price. However, Graphics will remain a **key contributor** to the overall financial performance of the business.

FINANCIAL PERFORMANCE

PRICE/EARNINGS RATIO (PER) TTM :

- Nvidia: 108.74
- Industry: -239.26

Nvidia has a P/E ratio well **above** the **industry average**, indicating that investors value its earnings more highly. The negative industry P/E suggests sector losses, **highlighting Nvidia's strong performance relative to its peers**.

PRICE/SALES TTM :

- Nvidia: 34.36
- Industry: 14.69

Nvidia's Price/Sales TTM ratio is **34.36**, substantially **higher** than the **industry average** of **14.69**. This elevated ratio suggests that investors are willing to pay a **premium** for Nvidia's sales, possibly indicating higher sales growth expectations for Nvidia compared to other companies within the industry. This could be attributed to innovative product offerings, market leadership, or other **unique** competitive **advantages** that Nvidia might possess.

PRICE/CASH FLOW MRQ :

- Nvidia: 74.82
- Industry: 30.2

Nvidia's Price/Cash Flow (P/CF) ratio of 74.82, significantly higher than the industry average of 30.2, suggests a **potential overvaluation** compared to its peers, as investors are paying a premium per unit of cash flow. This could indicate **high investor confidence** in Nvidia's future financial prospects and growth, warranting a deeper analysis to validate the premium valuation.

PROFITABILITY:

NVIDIA's net profit margin is **31.6%**, which is significantly higher than the industry average of **15.08%**. This indicates that NVIDIA is more **efficient** at converting its revenues into actual profit compared to its industry peers, showcasing a potentially stronger operational and financial performance.

ANALYSIS OF FINANCIAL RATIOS

LIQUIDITY RATIO MRQ:

- Nvidia: 2.23
- Industry: 1.86

Nvidia has a liquidity ratio of **2.23**, which is above the industry average of 1.86, indicating that it has a **superior ability to cover its short-term obligations** compared to its peers. This suggests a **solid financial position** and effective management of its short-term liabilities and operational costs.

TURNOVER PER TTM EMPLOYEE:

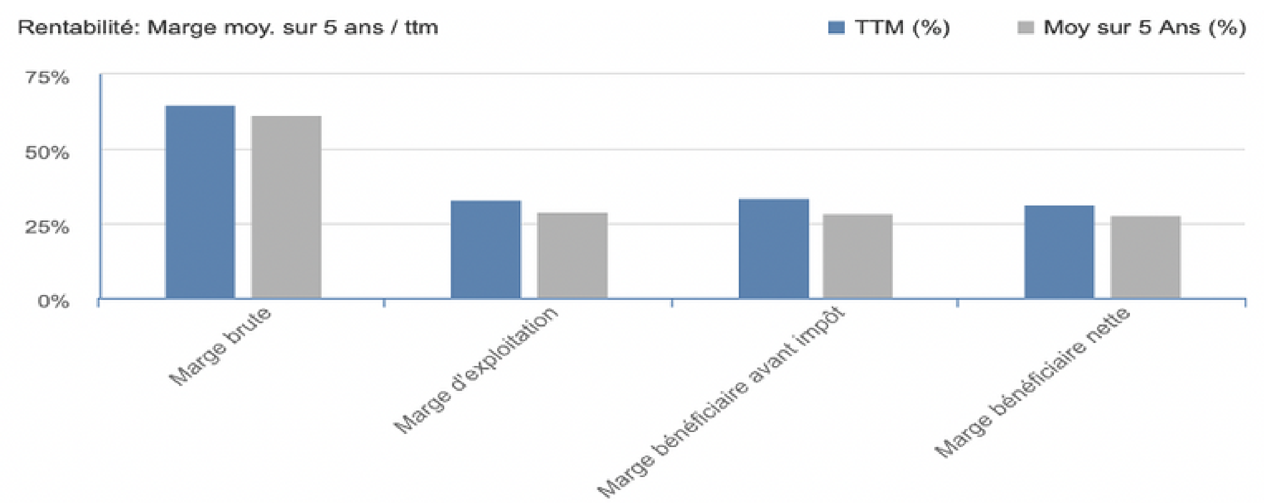
- Nvidia: 1.25M million
- Industry: $6.00M million

Nvidia's turnover per employee is $1.25M million, which is significantly lower than the industry average of $6.00M million. This might suggest that Nvidia generates less revenue per employee compared to the industry standard, potentially indicating a **lower operational efficiency** or a more labor-intensive business model.

EPS GROWTH OVER 5 YEARS (5YA):

- Nvidia: 6.67%
- Industry: 18.48%

Nvidia's EPS growth over the past 5 years is 6.67%, which is notably lower than the industry average of 18.48%. This suggests that Nvidia has experienced **slower earnings growth** compared to its peers, potentially indicating a reduced growth potential or competitive challenges within the industry during this period.



LATEST NEWS

Shares in major technology companies such as **Apple, Meta Platforms, Alphabet** and **Microsoft** have fallen, putting general pressure on the stock market. This downward trend is attributed to concerns about new **US restrictions on chip exports to China.**

In particular, shares in Nvidia, which specialises in **computer chips**, have been significantly affected by these concerns. The White House is apparently examining options for restricting Chinese companies' access to artificial intelligence chips supplied by US companies.

Israeli-Palestinian conflict: The Tel Aviv stock exchange fell by **7%**, and many businesses remained closed in Israel following coordinated attacks by Hamas that led to the deaths of hundreds of Israelis in the south of the country. This situation has also had an impact on the value of the **shekel**, which is already at its lowest level of the year due to the demonstrations against the judicial reform of Benjamin Netanyahu's government. Some analysts are forecasting a further fall in the national currency when the foreign exchange market opens on Monday. As a result, Nvidia, the world's leading manufacturer of graphics processors, has cancelled a summit on artificial intelligence scheduled for next week in Tel Aviv.

SHARE PURCHASE

To calculate in detail the number of shares we need to buy with a budget of **$50,000**, we will use the formula Total budget/closing price of the shares :

Number of shares = **50,000/ 451.90 ≈110.52**

Number of shares ≈ 110.52

So, with a budget of **$50,000** and a price per share of **$451.90**. We can buy **110 shares of NVIDIA.**

OUR OPINION

Our group decided to invest in **NVIDIA** because of its **leadership** in **artificial intelligence** and **graphics technologies**. NVIDIA's strength in the chip market and its potential in data centers convinced us of its **growth potential**. We are confident in NVIDIA for the future.

FINANCIAL PERFORMANCE

PRICE/EARNINGS RATIO (PER) TTM :

- Meta: 36.01
- Industry: 22.69

Meta has a higher P/E than the industry average, indicating that investors are **willing to pay more** for every dollar of Meta's earnings than the industry average.

PRICE/SALES TTM :

- Meta: 6.74
- Industry: 14.36

Meta's Price/Sales ratio is significantly lower than the industry average, which may indicate that investors have **lower sales growth expectations** for Meta relative to the industry.

PRICE/CASH FLOW MRQ :

- Meta: 5.84
- Industry: -4.53

Meta has a positive Price/Cash Flow ratio, which is positive, but it is below the industry average. A lower ratio may indicate that Meta is **overvalued** relative to its cash flow generation.

PROFITABILITY:

- Meta's net profit margin is **18.71%**, which is lower than the industry average of **29.97%**. This indicates that Meta generates less profit relative to its revenues than the industry average.

LIQUIDITY RATIO MRQ:
- Meta: 2.2
- Industry: 1.71

Meta has a higher liquidity ratio than the industry average, indicating that it has a **better ability to repay its short-term debts**.

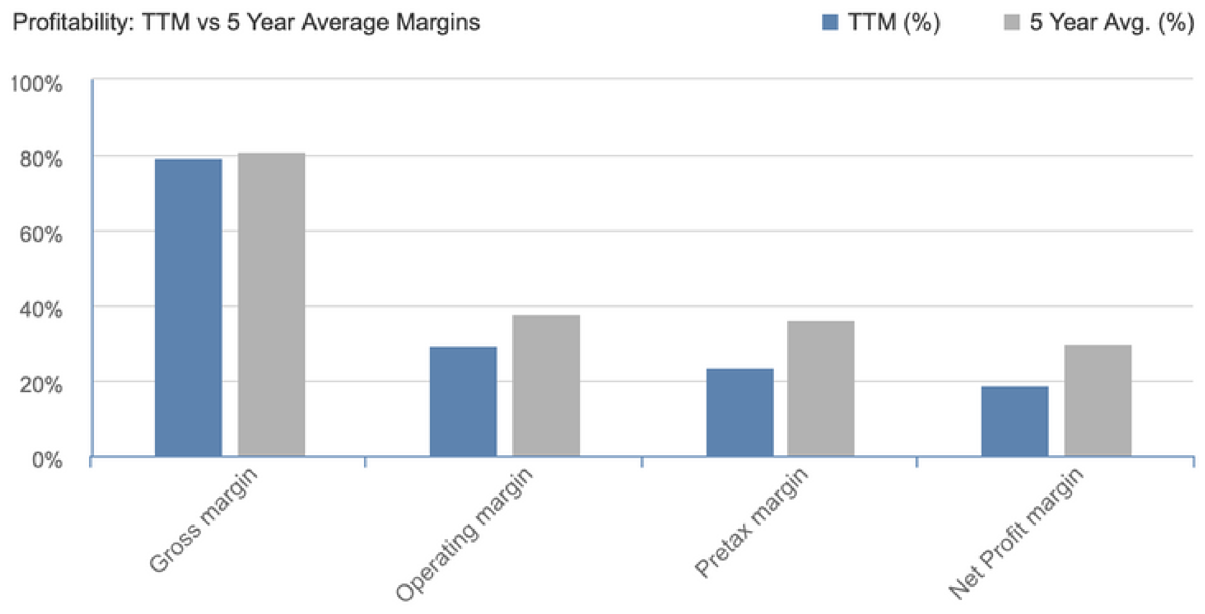
TURNOVER PER TTM EMPLOYEE:
- Meta: $1.69 million
- Industry: $5.27 million

Meta's turnover per employee is significantly lower than that of the industry, perhaps indicating **lower operational efficiency**.

EPS GROWTH OVER 5 YEARS (5YA):
- Meta: 9.49
- Industry: 21.64

Lower earnings growth over five years may indicate **lower growth potential** than the industry.

ASSET TURNOVER TTM:
- Meta: 0.64
- Industry: 0.62



LATEST NEWS

In 2023, Meta faces a significant challenge. Sales forecasts are disappointing, and operating costs are on the rise, putting financial pressure on the company. These factors, weak sales, and higher costs create a tough situation, leading to an expected 20% drop in Meta's share value.
In the third quarter of 2022, Meta's financials were severely affected, with a **52% drop** in net profit to **$4.39 billion**, or **$1.64 per share**. This profit decline is linked to sales issues and increasing costs.

Faced with pressure from investors and investment in the metaverse, Meta is laying off **11,000 employees** (13% of its workforce). At the start of 2023, Mark Zuckerberg confirmed a further **10,000** redundancies and the closure of 5,000 vacancies to reduce spending, due to falling online advertising sales. Against all expectations, the group revealed a fairly impressive financial performance, posting strong revenue growth while betting on AI tools.

During the **Israel-Palestine conflict**, Meta removed **QNN** (Palestinian news page) News Network from Facebook. It's seen as siding with Israel and **limiting freedom of expression**, denying Palestinians the right to cover Gaza for the world.
Meta's position has had a significant impact on its financial results.

SHARE PURCHASE

To calculate in detail the number of shares we need to buy with a budget of **$50,000**, we will use the formula Total budget/closing price of the shares :

Number of shares = **50,000/314.69 ≈ 158.88**

So, with a budget of $50,000 and a price per share of $314,69. We can buy **158 shares of META.**

OUR OPINION

A lower asset turnover ratio may indicate that Meta is not using its assets as effectively to generate sales compared to the industry average. Taking all these factors together, we can conclude that Meta may be **overvalued relative** to the industry because of its high **P/E, low price/sales ratio, lower profitabilit**y, and **lower turnover per employee**. In addition, its asset turnover ratio is only slightly higher than the industry average, and its 5-year EPS growth is significantly lower than the industry average.

TECHNICAL ANALYSIS

For **META's shorts**, we tried to make a technical analysis in order to optimize our entry point and imagine our future exit zone.

To do this, we used several liquidity-related concepts:

Imbalance: occurs when a price leaves a specific level in a strong and unilateral manner: this can signify the presence of liquidity in that price zone.

Fibonacci retracement: used to recognize :
* bearish reversal levels if there is an upward trend.
* bullish reversal levels in a bearish trend.

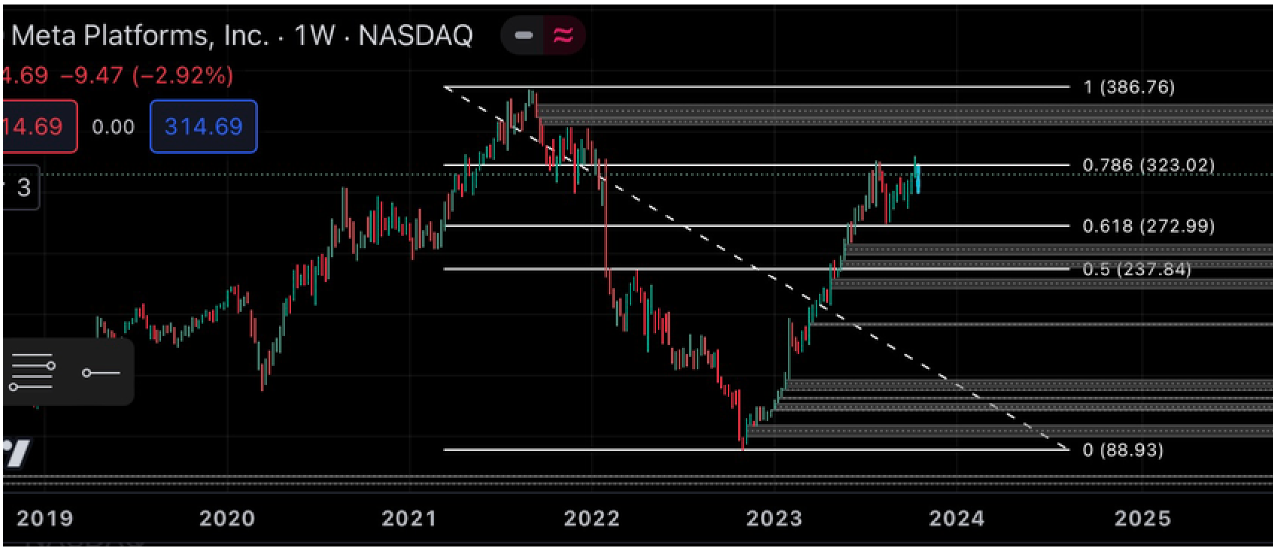
Market structures: define the trend the market is in: bullish, bearish and neutral.

Here's the price in 1H. Our analysis dates from **Thursday 12** and as we can see, the market has corrected well since then.

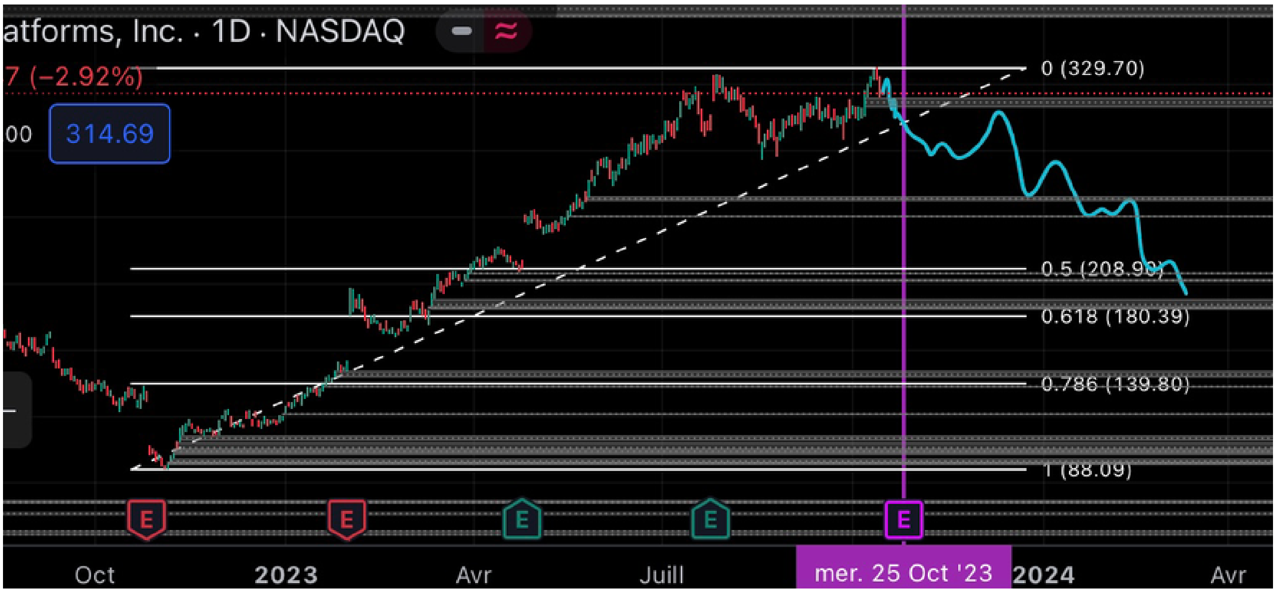
"BOS" are structural changes.
The last one is not shown because it occurred during our analysis.

The **Doji** is a particular candle with a small body and large wicks, and can be a sign of a reversal.

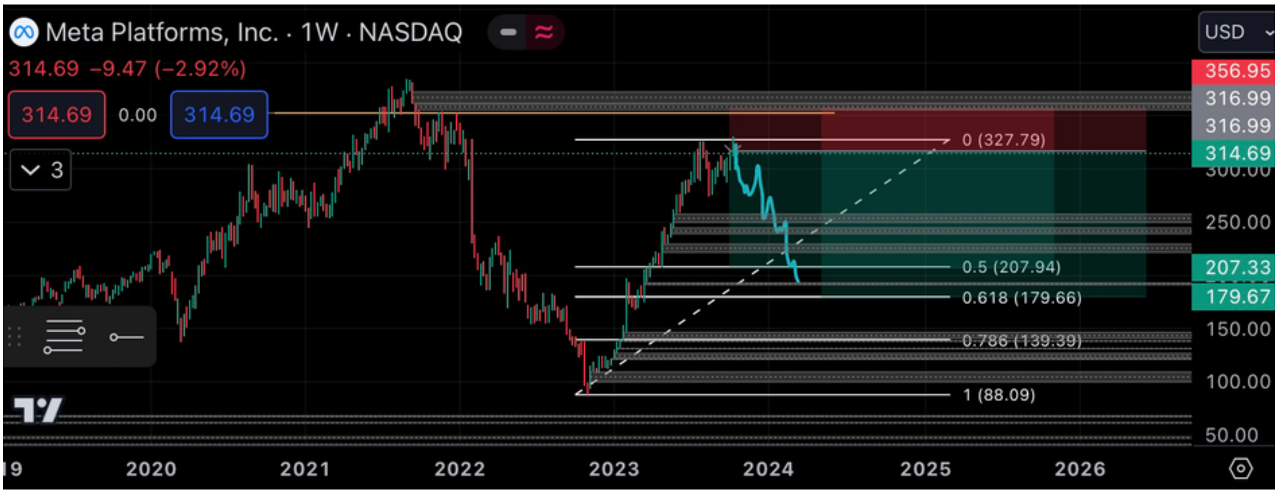
We can see that the price stops at the **50% Fibonacci mark**, an important percentage as it marks the boundary between "prenium price" and "discount price".



Other important Fibonacci levels are **0.786** and **0.618**. As you can see, the price has rebounded between these two zones.



If we use it for our exit point. We could imagine a target at 50% of Fibonacci, i.e. **$208**. We could then take a large part of our profits, and why not keep a little to target the other levels (**0.618 -0.786**). But that will depend on the news and the economic situation.



We'll also set a stop loss to avoid losses if our analyst is wrong. **Take profit** and **stop loss** are essential for good **money management.** Our stop loss is at 357, just above **resistance** and inside an **imbalance**. If the price crosses this imbalance (in grey), our analysis will be wrong, as the price risks reaching its **ATH** (All Time High). Our **risk-reward ratio** on this plan is **2.74** for the first take-profit, and **3.44** for the second, so money management is well respected.

GLOBAL ASSET MANAGEMENT

GROUP F

Doriane Duteil, Océane Rozniatowski,
Titouan Clément, Basile Arthaud,
Hugo Moissonnier, Charles Milliand,
Charles Blethon.

CONTENT

MUTUAL FUND

A mutual fund is a type of investment that consists of creating a diversified portfolio of stocks, bonds or other securities.

1. Aggressive Investors
2. Moderate investors
3. Conservative

Based on :

- investment knowledge,
- investment time,
- objective research,
- the amount of money the investor is capable of investing
- investor's ability to accept risk

ADVANTAGES

Low minimum investment size :

It provides a relatively low minimum investment size because most of the funds will require investors to raise a capital of **$500 to $3000** to begin. In any case, brokers have lower minimums. A few offer stores for as small as $100, and others have no limits to how much you would like to induce.It is also worth mentioning that once you meet the minimum capital requirements, there is no limit to the amount you can invest in the future. For example, if you have at least $500 and raised it as an initial investment, you can only invest $10 next month.This kind of **flexibility** is very important for individual investors with unstable sources of income.

Diversify with less money:

It offers diversification with minimum money. **Diversification** is not always cheap and easy. To achieve **optimal diversification, you should have around 20 to 30 different securities in your portfolio.** This diversification can be expressed **across countries, sectors, and industries.** A typical mutual fund has 30 or more securities in its portfolio and some hold more than 500 securities. Funds that track the **S&P 500** are a great example.

Cost-effective to trade:

The trading fees of a typical mutual fund are lower than those of an ETF. This has a lot to do with the fact that mutual funds typically trade at their **net asset value (NAV)**, which is essentially their **per-share market value.** Having mutual funds trade their net asset value has two cost-saving benefits: First, this means that bid/ask spreads do not apply to mutual funds. With a single price per day, all traders can buy/sell at a unified price. Second, when the price matches the **market value of the stock**, investors don't have to worry about paying additional fees to the fund. Mutual funds can also be due to the simple fact that investors share expenses. When multiple investors pool their resources into a single fund, they reduce transaction costs and improve operational efficiency through economies of scale.

Access specialized market:

Investors can access specialized market sectors. With their ability to analyze and execute complex strategies, mutual funds can be a great way for small investors to participate in specialized market sectors without taking on too much risk or investment. a lot of money. A single investment in a specialty mutual fund gives you access to market areas that may be too expensive or logistically inaccessible with a separately managed account (SMA). And this doesn't mean that the minimum investment of specialized mutual funds is often a fraction of the SMA.

Allow dividend reinvestment

The reason is that the more you increase your investments now, the more likely you are to achieve higher returns in the future. A dividend reinvestment plan is one of the best ways to grow your investments on “autopilot.” Their operation is quite simple: Every time you pay a dividend, you choose to reinvest it instead of receiving the money. The more dividends you pay over time, the more capital you grow without investing anything out of your own pocket.

VANGUARD EMERGING MKTS STOCK

As part of our investment strategy focused on emerging markets, we have chosen the “Vanguard Emerging Mkts Stock” fund. This decision is in line with our desire to **capitalise** on the opportunities offered by **fast-growing economies**.

The Vanguard Emerging Mkts Stock fund is recognized for its **strong performance** and ability to navigate through diversified emerging markets efficiently. With a **rigorous investment strategy** and **active management**, this fund has demonstrated its ability to generate competitive returns while minimizing the risks associated with emerging markets.

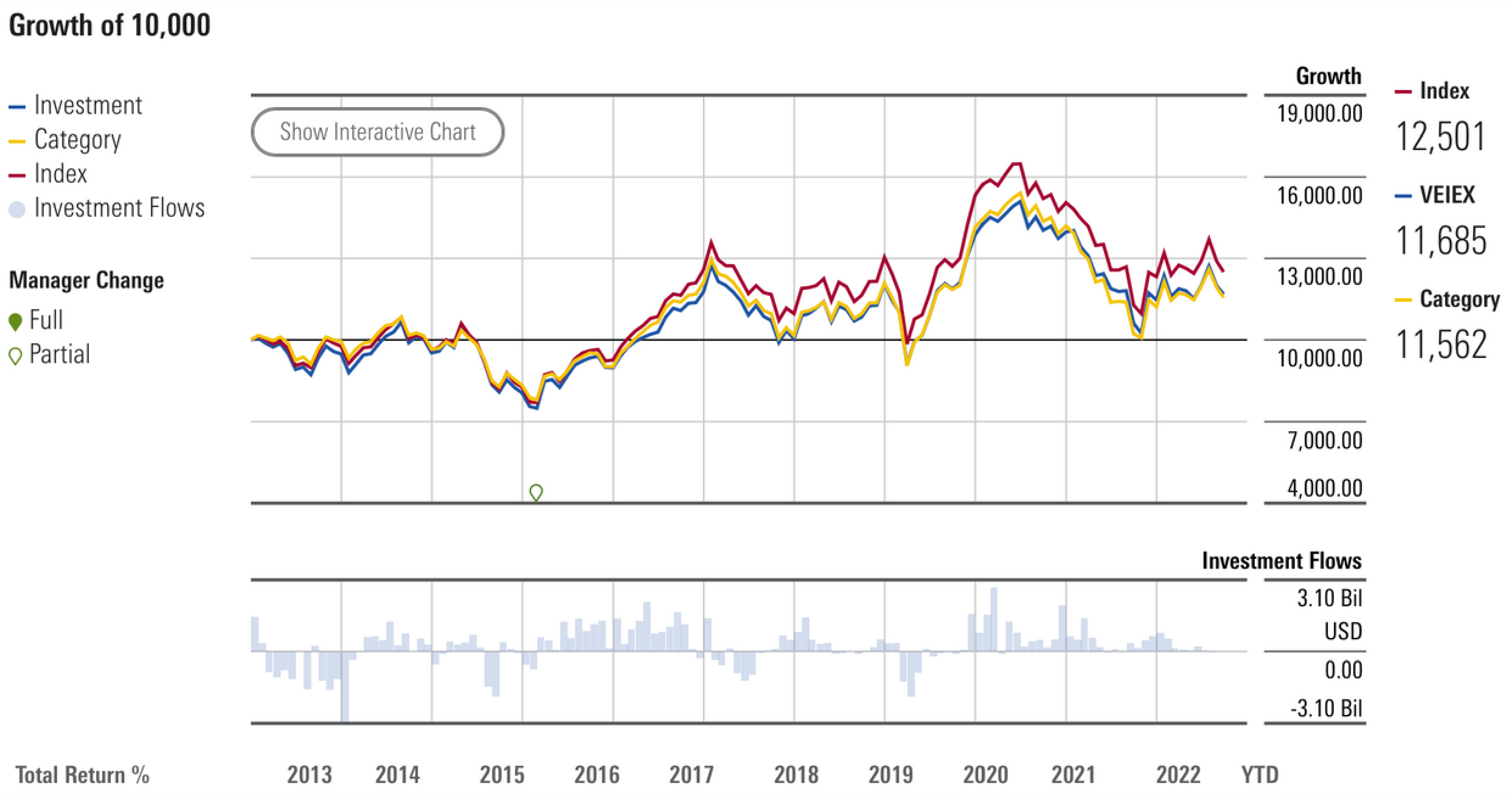
Furthermore, the **management fees** associated with this fund are **competitive**, making it a wise choice for cost-conscious investors. By opting for the “Vanguard Emerging Mkts Stock fund”, we are advantageously positioned to benefit from the **attractive returns** and **diversification** offered by these markets.

We are convinced that this strategic choice will enable us to achieve our long-term investment objectives and maximise returns for our readers and investors.

QUOTE AND HISTORICAL PERFORMANCE

NAV / 1-Day Return	Total Assets	Adj. Expense Ratio ⓘ	Expense Ratio	Distribution Fee Level	Share Class Type
24,85 / ↑ 0,28%	70,1 Bil	0,290%	0,290%	Low	No Load
Category	**Investment Style**	**Min. Initial Investment**	**Status**	**TTM Yield**	**Turnover**
Diversified Emerging Mkts	Large Blend	—	Limited	3,28%	7%

USD | NAV as of Sep 28, 2023 | 1-Day Return as of Sep 28, 2023, 12:20 AM GMT+2

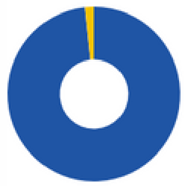


The fund adopts a "**Large Blend**" investment style, indicating **diversification** between growth and value stocks of large companies. It manages **total assets** of **$70.1B**, reflecting its size and market reach. Its **expense ratio** of **0.29%** is an indicator of effective cost management, allowing investors to retain more of their returns. The **TTM** (Trailing Twelve Months) return of **3.28%** gives an idea of the income generated by the fund over the past year. With a low **turnover rate** of **7%**, the fund demonstrates a **stable investment strategy**, minimising the costs associated with frequent transactions.

In terms of performance, since 2013 the **VEIEX fund** has shown solid growth, rising from **10,000** to **11,685** today. This growth is compared to the **index**, which stands at **12,501**, and the mid-range category at **11,562**, providing a perspective on the fund's relative performance against its peers and the market as a whole.

Its growth since 2013, although **below the index**, has **outperformed the average for its category**, indicating prudent and effective management. Given these factors, we are optimistic that the fund will continue to provide stable returns and deliver strong performance in the future.

HOLDINGS



Portfolio Holdings	No.	%
Equity Holding	4,701	98.33
Bond Holding	0	0.00
Other Holding	80	1.67

% Assets in Top 10 Holdings	Reported Turnover %	Women Directors %	Women Executives %
18	7.00 As of 10/31/22	16	13

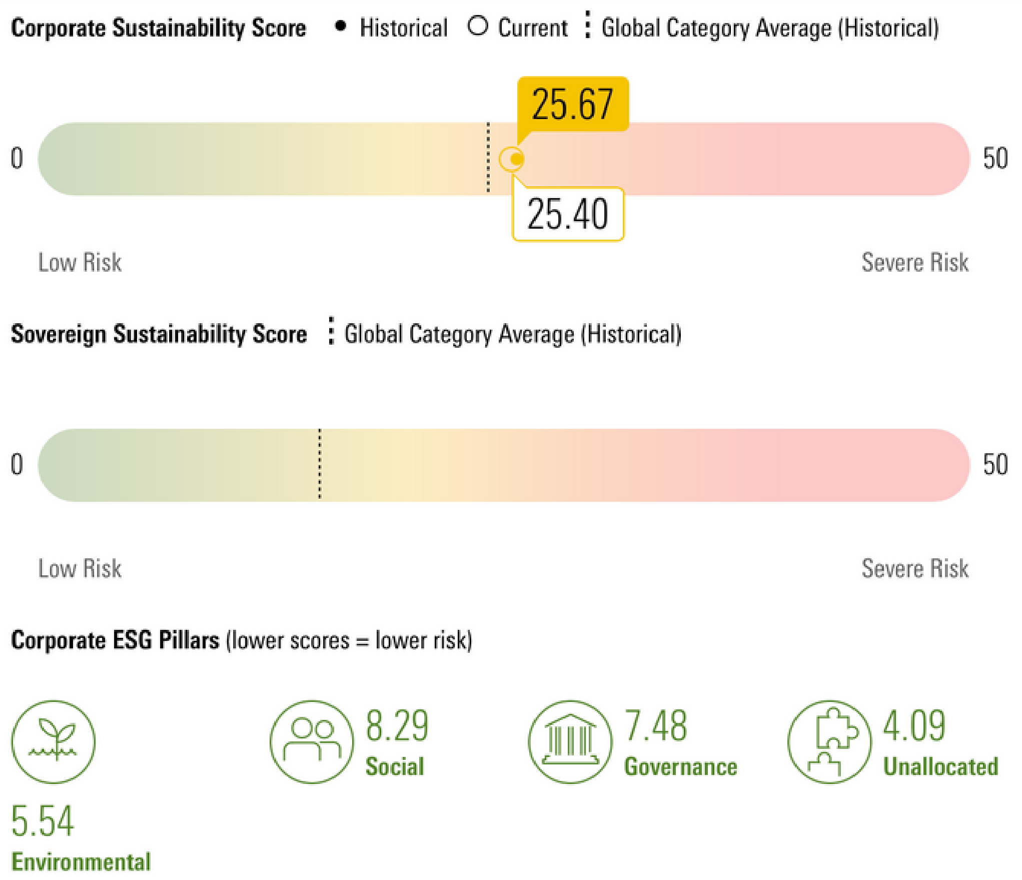
Current Portfolio Date	Equity Holdings	Bond Holdings	Other Holdings	% Assets in Top 10 Holdings
Aug 31, 2023	4701	0	80	17,5

Top 10 Holdings	% Portfolio Weight	Market Value USD	Sector
Taiwan Semiconductor Manufacturing Co Ltd	4,91	4 957 396 837	Technology
Tencent Holdings Ltd	3,55	3 584 941 644	Communication Services
Alibaba Group Holding Ltd Ordinary Shares	2,75	2 773 470 305	Consumer Cyclical
Mktliq 12/31/2049	1,53	1 545 872 098	Cash and Equivalents
Slbbh1142	1,43	1 444 065 562	Cash and Equivalents
Reliance Industries Ltd	1,34	1 351 207 162	Energy
Meituan Class B	1,21	1 225 835 414	Consumer Cyclical
Infosys Ltd	0,83	840 155 390	Technology
Taiwan Semiconductor Manufacturing Co Ltd ADR	0,81	819 041 883	Technology
HDFC Bank Ltd	0,77	775 060 676	Financial Services

The VEIEX fund has a **strong equity exposure**, with **98%** of its assets invested in **equities**. This reflects an orientation towards **growth** and the potential for **high returns**. Of these equities, **17.5%** of assets are concentrated in the **top 10 holdings**, indicating a degree of **concentration**, but also **confidence** in these specific investment choices. With a total of 4,701 equity holdings, the fund offers **considerable diversification**, reducing the risks associated with reliance on a small number of stocks.

In terms of sector allocation, the fund is invested in key sectors such as **technology**, **communication services**, **energy**, **consumer cyclicals** and **financial services**. The presence of **cash and cash equivalents** also suggests a **prudent management strategy**, allowing flexibility in allocations and responsiveness to market opportunities.

STRATEGY AND SUSTAINABILITY



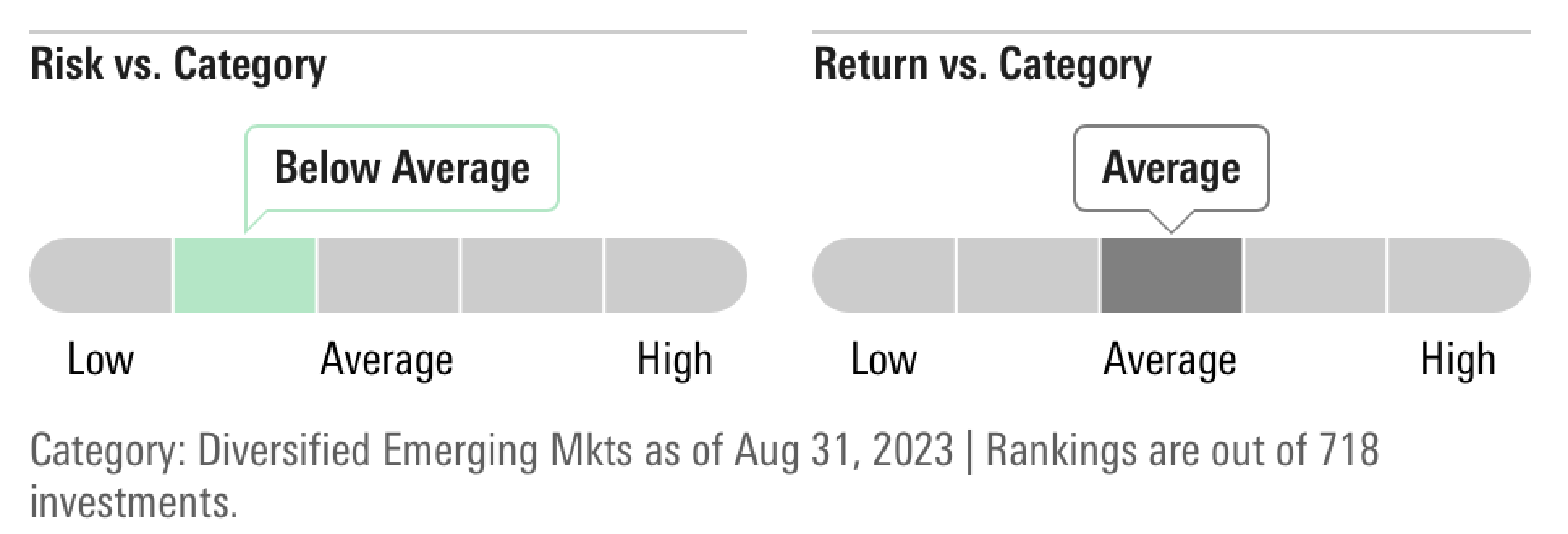
Investment strategy:

The fund seeks to **track the performance** of a **benchmark index** measuring the performance of equities issued by companies located in emerging markets. It adopts an index-based investment approach designed to track the performance of the **FTSE Emerging Markets All Cap China A** Inclusion Index. By sampling the index, the fund holds a **diversified collection of securities** that, taken together, approximate the index in terms of key characteristics. This method allows the fund to benefit from **diversification** while **minimizing performance deviations from the benchmark**.

Sustainability:

The VEIEX fund has a **corporate sustainability score** of **25.4**, down slightly from its **historic score** of **25.67**, but still **above the global average** for the category of around **23/24**. With **1,817 investments** in the global category, the fund demonstrates broad reach and diversification. In addition, its **contribution to corporate sustainability** is **100%**, indicating a **total commitment** to responsible and sustainable investment practices.

RISK



Market Volatility Measures

Capture Ratios	Investment	Category	Index
Upside	71	79	75
Downside	86	95	91

Drawdown	Investment %	Category %	Index %
Maximum	-32.16	-34.62	-33.46

Drawdown Peak Date	Drawdown Valley Date	Max Drawdown Duration
Jul 01, 2021	Oct 31, 2022	16 Months

USD | As of Aug 31, 2023 | Category: Diversified Emerging Mkts | Index: Morningstar EM TME NR USD | Calculation Benchmark: MSCI ACWI Ex USA NR USD | Drawdown as of Aug 31, 2023

The fund has a **lower risk** than the average for its category. This means that, compared with other funds in its category, VEIEX tends to show **less pronounced fluctuations** in value, which may be attractive to investors seeking a degree of stability. In terms of performance, the fund is in the middle of its category, indicating that it **offers returns comparable to those of similar funds**.

Drawdown:
The drawdown measures the **maximum fall** from the peak to the trough of an investment before it rises again. For the **VEIEX fund**, the drawdown is **-32.16%**, which is less pronounced than the **index** at **-33.46%** and the **category** at **-34.62%**. This indicates that the fund has been **more resilient** to market declines than both the index and the category average.

Capture ratios:
Capture ratios measure the **fund's performance in bull** (upside) and **bear** (downside) **markets relative** to a benchmark index.

Upside Capture:
With a ratio of **71**, the **VEIEX** fund captures **71%** of the positive returns of the index during **bull markets**, slightly below the **index** at **75** and the **category** at **79**.

Downside Capture:
With a ratio of **86**, VEIEX captures **86% of the negative returns** of the index during **bear markets**, which is better than the **index** at **91** and the **category** at **95**. This means that the fund tends to **fall less** than the **index** and the **category** during bear markets.

PRICE/EXPENSES

Maximum Sales Fees

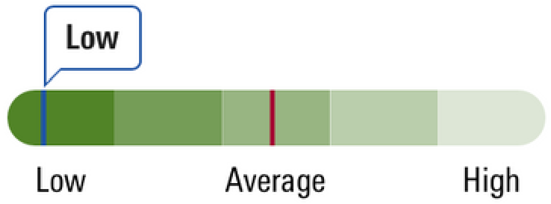
Front Load	Deferred Load
—	—
Redemption Load	**Min. Initial Investment**
—	0.00

USD

Ongoing Fee Level

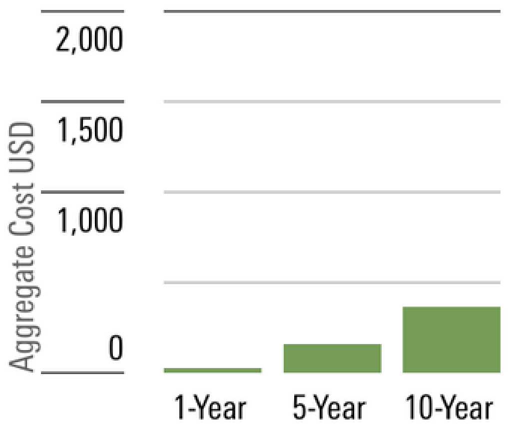
Net Expense Ratio

Investment	Emerging Markets Stock No Load
0.290	1.180



As of Aug 31, 2023

Cost Illustration (10k; 5% Return; USD)



Fees	1-Yr	5-Yr	10-Yr
Purchase	0	0	0
Ongoing	30	163	368
Redemption	0	0	0
Total	30	163	368

Ongoing fees as of Feb 27, 2023. The fees illustrated above do not reflect any additional account-related fees and charges.

Ongoing costs :

The **net expense ratio** for the **VEIEX** fund's investment option is **0.29%**. In comparison, the **Emerging Market Stock no Load** option has a much higher ratio of **1.180%**. This low ratio for the investment option indicates that the fund is **efficient** in terms of **cost management**, allowing investors to retain a **greater share of their returns**.

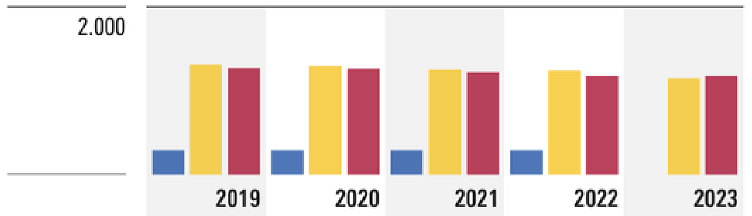
Historical Fee Trends :

Over the years, the VEIEX fund has **maintained a consistent fee structure**. In both 2019 and 2022, the expense ratio for the investment option has remained **stable** at **0.29%**. In comparison, the **category average** decreased slightly from **1.312% in 2019** to **1.148% in 2022**. Although the category average has decreased, the VEIEX fund remains **significantly more competitive in terms of fees**.

Management fees:

The VEIEX fund charges a management fee of **0.17%**. This fee is intended to cover the costs associated with the active management of the investment portfolio.

Historical Expense Ratio %



	2019	2020	2021	2022	2023
Investment	0.290	0.290	0.290	0.290	–
Category Average	1.317	1.299	1.255	1.241	1.148
Comparison Group	1.270	1.265	1.225	1.180	1.180

Expense Ratio: Annual Report | Fee Level Comparison Group: Emerging Markets Stock No Load

Other Fees

Management Actual	Management Maximum
0.17%	0.17%
12b-1 Maximum	**Administrative Maximum**
—	0.17%
Expense Waivers	
—	

Taxes

3-Year Tax Cost Ratio

Fund	Category
0.91	1.13

Potential Capital Gains Exposure

-25%

As of Aug 31, 2023

ASSET ALLOCATION

	Sectors	Investment %	Cat %
Cyclical	Basic Materials	8.63	6.28
	Consumer Cyclical	13.64	13.99
	Financial Services	20.71	21.60
	Real Estate	2.81	1.68
Sensitive	Communication Services	9.38	8.76
	Energy	5.44	4.44
	Industrials	8.28	6.76
	Technology	16.95	22.85
Defensive	Consumer Defensive	6.37	7.41
	Healthcare	4.53	4.62
	Utilities	3.26	1.60

Country	Investment %	Cat %
China	31.38	26.15
India	18.69	15.47
Taiwan	17.67	13.91
Brazil	6.21	7.74
South Africa	3.30	2.60
Mexico	3.08	3.61
Thailand	2.75	1.55
Indonesia	2.32	2.55
Malaysia	1.86	0.62
Turkey	1.19	0.42

Stock Style Map | Weight | Historical

	Value	Blend	Growth
Large	18	42	18
Medium	6	8	4
Small	2	2	1

Weight %
- 50+
- 25–49
- 10–24
- 0–9

Asset Allocation

Asset Class	Net	Short	Long	Cat.	Index
U.S. Equity	0.16	0.00	0.16	2.57	0.06
Non-U.S. Equity	96.32	0.00	96.32	95.65	99.94
Fixed Income	0.00	0.00	0.00	0.01	0.00
Other	0.03	0.00	0.03	0.14	0.00
Cash	3.48	0.00	3.48	2.49	0.00
Not Classified	0.01	0.00	0.01	0.03	0.00

Investment as of Aug 31, 2023 | Category: Diversified Emerging Mkts as of Aug 31, 2023 | Index: Morningstar EM TME NR USD as of Aug 31, 2023 | Source: Holdings-based calculations.

Sectors:

The VEIEX fund is mainly invested in **cyclical sectors** at **45.79%**, followed by **sensitive sectors** at **40.05%** and **defensive sectors** at **14.16%**. In comparison, the category average is slightly different, with **43.55%** in **cyclicals**, **42.81%** in **sensitive sectors** and **13.64%** in **defensive sectors**. This sector allocation of the VEIEX fund indicates a **focus** on **cyclical sectors**, reflecting a **growth-oriented approach**.

Equity style:

The majority of the VEIEX fund is invested in **"Large Blend"** style equities (**42%**). **Large Value** and **Large Growth stocks** each account for **18%** of the portfolio, providing a **balanced diversification between growth and value**.

Country allocation:

The VEIEX fund is heavily invested in China (**31.38%**), India (**18.69%**) and Taiwan (**17.61%**). Other notable countries include Brazil (**6.21%**) and South Africa (**3.3%**) for a total of **77.19%**. In comparison, the category average for these countries is **65.87%**, indicating a different geographical diversification for the VEIEX fund.

PEOPLE

Inception Date	Number of Managers	Women on Team %	Longest Tenure	Average Tenure	Advisor(s)
May 04, 1994	2	—	15.1 Years	11.3 Years	Vanguard Group Inc

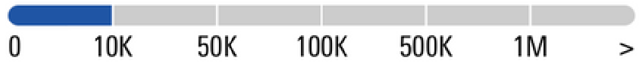
Management Team

Michael Perre — Aug 29, 2008–Present

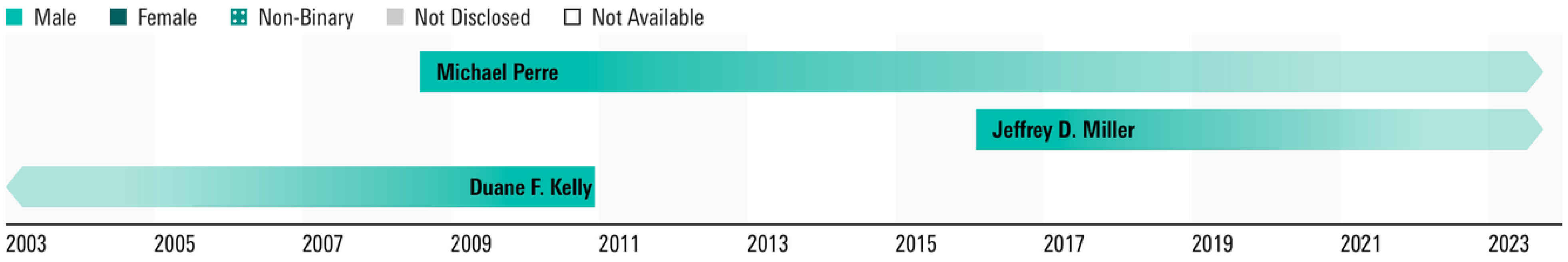
Position in Investment

Jeffrey D. Miller — Feb 26, 2016–Present

Position in Investment



Manager Timeline



Not Disclosed: All persons who have not disclosed their gender identity. | Not Available: No gender data is available for a particular manager.

The VEIEX fund is managed by a team of two experienced managers, each of whom brings a unique expertise and perspective to the management of the portfolio.

Michael Pierre:

Mr. Pierre is a key player in the management team, overseeing a significant portion of the fund's assets, between $100,000 and $500,000. With the **longest tenure of 15.1 years**, his experience and in-depth knowledge of the market are essential to the overall strategy and performance of the fund.

Jeffrey D. Miller:

Although he manages a smaller portion of the assets, less than $10,000, Mr. Miller also contributes to the management of the fund. His perspective and expertise complement those of Pierre, ensuring balanced and diversified management of the portfolio.

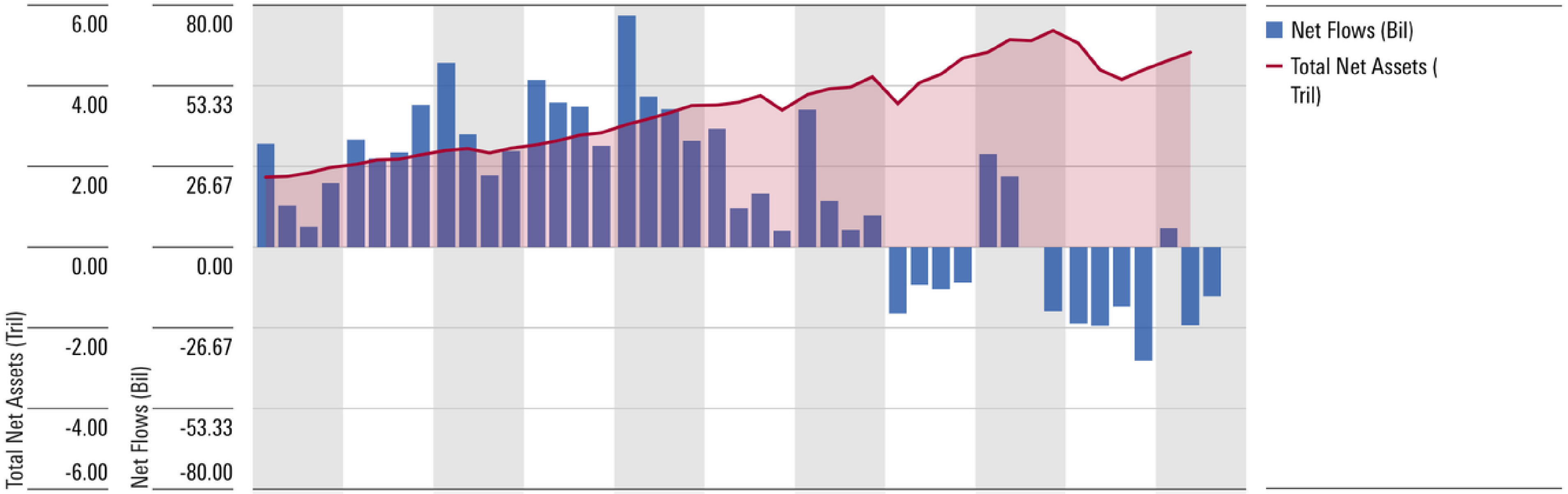
Team seniority :

The average seniority of the management team is **11.3 years**, reflecting their **collective experience** and **in-depth knowledge of the sector**.

PARENT

Firm Name	Market	Total Net Assets	Investment Flows (TTM)	Asset Growth Rt (TTM)	# of Investments	Mgr Retention Rate (5 Years)
Vanguard	US Open-end ex MM ex FoF ex Feeder	4.80 Tril	-85.82 Bil	-1.92%	147	90.18

Investment Flows



2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	
75.76	143.09	153.76	182.98	207.05	75.33	76.92	-60.30	32.91	-108.47	-35.89	Net Flows USD Bil
1.93	2.25	2.41	2.79	3.47	3.35	4.18	4.64	5.33	4.35	4.80	Total Net Assets USD Tril
4.86	7.41	6.84	7.59	7.41	2.17	2.29	-1.44	0.71	-2.04	-0.82	Growth Rate %
17.37	18.81	20.44	22.50	23.76	24.84	25.63	25.53	25.64	26.71	–	Industry Market Share %
130	130	133	137	141	141	145	143	148	148	148	Number of Investments

YTD as of Aug 31, 2023

Investment flows (TTM):

Over the past twelve months (TTM), Vanguard experienced net outflows of **-$85.82B**. This can be the result of various factors, such as **withdrawals**, **strategy changes** or **market conditions**.

Asset Growth Rate (AGR):

Vanguard's asset growth rate over the past twelve months was **-1.92%**. While this indicates a **slight contraction**, it is important to note that this is based on an already massive asset base.

Manager Retention Rate (5 years):

With a five-year manager retention rate of **90.18%**, Vanguard demonstrates its ability to retain key talent. A high retention rate is often a sign of a **strong corporate culture** and job satisfaction among managers.

Market share in industry:

The VEIEX fund's market share in industry has grown by an impressive **53.7%**, from **17.37%** in **2013** to **26.71%** in **2022**.

Number of Investments:

The fund's portfolio has grown over the years, with a **13.8% increase** in the number of investments, from **130** in **2013** to **148** in **2022**.

EXCHANGE TRADED FUND (ETF)

An ETF is called an exchange-traded fund because it is traded on a stock exchange, just like stocks. The ETF's share price will change throughout the trading day as shares are bought and sold in the market. This is different from mutual funds, which are not traded on exchanges and only trade once a day after the market closes. Additionally, ETFs tend to be more profitable and more liquid than mutual funds.

SPDR® GOLD SHARES

GLD
SPDR Gold Shares

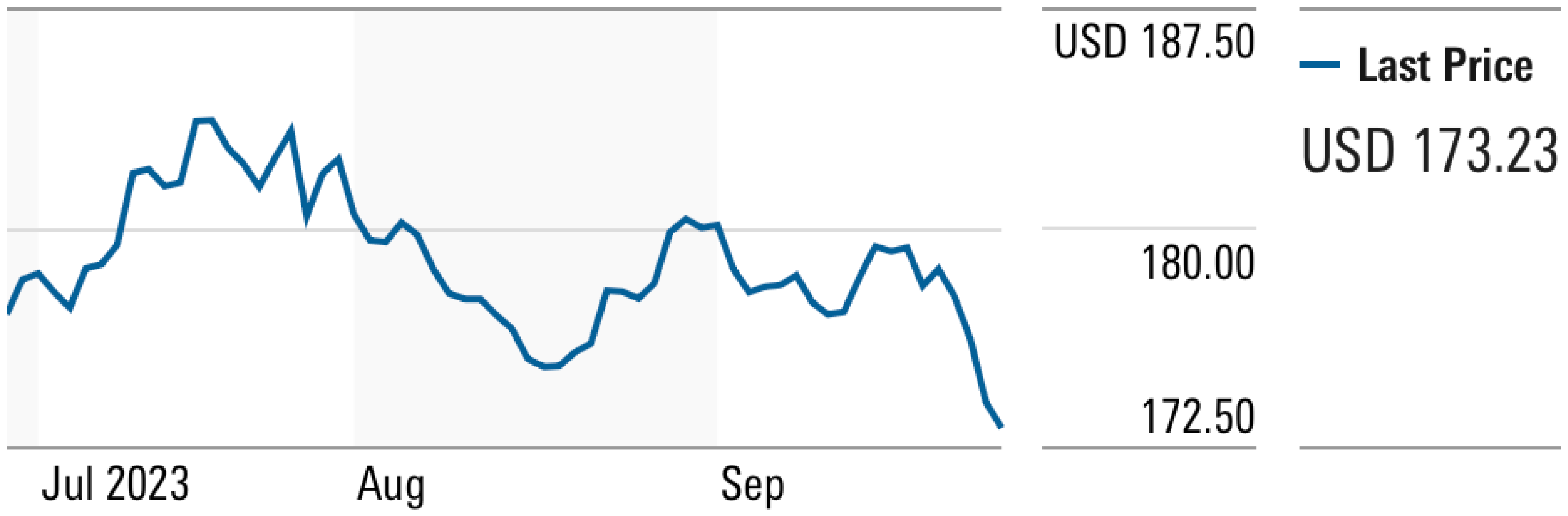
In line with our investment strategy, we have decided to invest in one of the safest ETFs, the **SPDR® Gold Shares**.

Gold exchange-traded funds (ETFs) are backed by physical gold bullion of **99.5% purity**. Unlike gold jewellery, the price of gold ETFs remains **constant**, ensuring that investors can buy or sell them at the same rate across the globe.

We chose the SPDR Gold Shares ETF (GLD) because it matches our **wealth preservation objective**. It can also ensure a **smaller loss** in the event of a **market downturn**. The GLD offers direct exposure to physical gold, is liquid, has low management fees and has historically been considered a store of value. This will allow us to benefit from the stability of gold while maintaining our strategy focused on more established markets.

We are convinced that this strategy will enable us to achieve our long-term investment objectives while maximising our returns.

QUOTE AND HISTORICAL PERFORMANCE



NAV	Open Price	Bid / Ask / Spread	Volume / Avg
173.80	173.91	173.33 / 173.39 / 0.03%	13.7 k / 5.7 Mil
Day Range	**Year Range**	**SEC Yield**	**12-Month Yield**
172.32 – 174.14	150.57 – 191.36	—	0.00%
Adj. Expense Ratio	**Expense Ratio**	**Total Assets**	**Category**
0.400%	0.400%	52.6 Bil	US Fund Commodities Focused

In terms of performance, during the last **30 Years**, the **SPDR Gold Trust (GLD) ETF** obtained a **5.38% compound annual return**, with a 15.44% standard deviation.
An investment of 1$, since September 1993, now would be worth 4.82$, with a total return of 381.86%.
The Inflation Adjusted Capital now would be 2.27$, with a net total return of 127.25%.

Over the last 3 months, the price of gold has risen by $200, taking it to new heights and reaching $2,000. Gold is therefore an attractive investment, since it is the only financial product that does not fall. It is seen as a safe haven in times of economic crisis, because its price tends to rise when stock market investments are falling. The reasons for this stagnation are the war going on in Eastern Europe and inflation worldwide. As a genuine hedge against inflation, but also against nervous international relations, gold retains its unrivalled attractiveness over time.

Given the profile of your experienced investors, who focus on wealth preservation and income stability, and who have a preference for mature markets such as the US and the eurozone, it is common to consider investing in a gold-linked ETF as a suitable strategy for achieving these objectives.

HOLDINGS, STRATEGY AND SUSTAINABILITY

Portfolio Holdings GLD

More GLD Holdings >

Current Portfolio Date	Equity Holdings	Bond Holdings	Other Holdings	% Assets in Top 10 Holdings
Sep 26, 2023	0	0	2	100,0

Top 10 Holdings	% Portfolio Weight	Market Value USD	Sector
Gold	100,00	53 011 044 089	—
Cash	0,00	900	Cash and Equivalents

Sustainability Rating

Corporate Sustainability Contribution	Sovereign Sustainability Contribution
—	—

Number of Investments in Global Category	Sustainable Investment
43	No

Portfolio Holdings:

The Gold ETF is fully invested in gold, providing **full exposure** to the price of this precious metal. This means that 100% of this ETF's assets under management consist of gold bullion.

ETF Strategy:

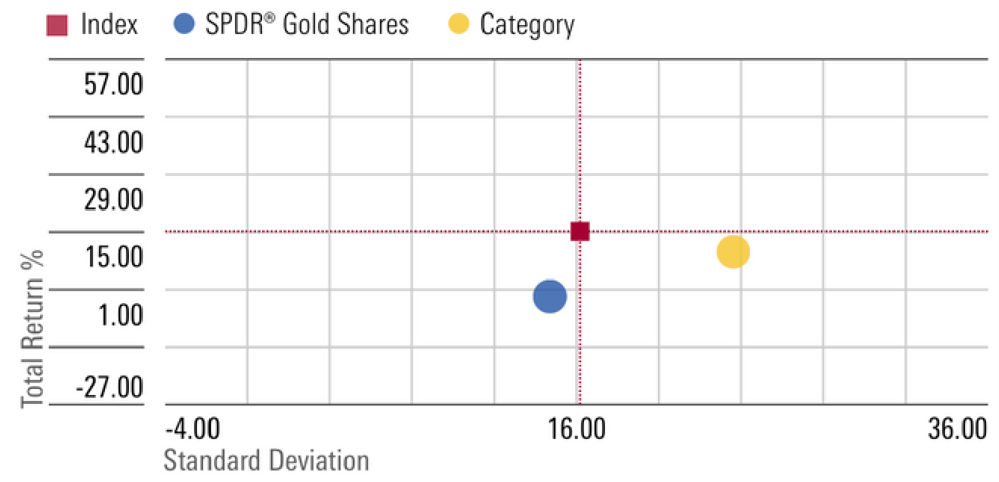
The ETF aims to reflect the price performance of gold in bullion form, net of the Trust's operating costs. The Trust **holds gold bullion** and, from time to time, **issues baskets** in exchange for gold deposits and distributes gold in connection with redemptions of these baskets. The aim is for the shares to reflect the **performance of the price of gold in bullion form**, net of the Trust's fees. The strategy adopted by the ETF offers investors **direct exposure to gold**, which for many investors is **very attractive**.

Sustainability:

As far as sustainability is concerned, there is **not much information available**. However, it should be noted that the Gold ETF is part of a global category comprising 43 investments. This places the Gold ETF in a broader context of investments focused on gold and other precious metals.

RISK

Risk/Return Analysis



USD | Category: Commodities Focused | Index: Bloomberg Commodity TR USD | Return as of Aug 31, 2023 | Standard Deviation as of Aug 31, 2023

Market Volatility Measures

Capture Ratios	Investment	Category	Index
Upside	-3	62	—
Downside	-1	62	—

Drawdown	Investment %	Category %	Index %
Maximum	-17.34	-14.41	-22.48

Drawdown Peak Date	Drawdown Valley Date	Max Drawdown Duration
Aug 01, 2020	Oct 31, 2022	27 Months

USD | As of Aug 31, 2023 | Category: Commodities Focused | Index: Bloomberg Commodity TR USD | Calculation Benchmark: Bloomberg Commodity TR USD | Drawdown as of Aug 31, 2023

Risk & Volatility Measures

Trailing	Investment	Category	Index
Alpha	-3.30	0.79	—
Beta	0.13	0.68	—
R^2	2.19	23.25	—
Sharpe Ratio	-0.10	0.38	0.83
Standard Deviation	14.70	23.63	16.17

USD | Investment as of Aug 31, 2023 | Category: Commodities Focused as of Aug 31, 2023 | Index: Bloomberg Commodity TR USD as of Aug 31, 2023 | Calculation Benchmark: Bloomberg Commodity TR USD

As a safe-haven investment, gold often offers investors a sense of security. A gold ETF allows an individual to invest quickly in gold bullion, as delivery and ownership of the gold never take place. Although prices can move quickly, this is an asset that is intended to be held through years of economic turbulence, not something that is bought and sold within hours or days of purchase.

The ETF has a **lower upside capture** ratio than its category. This means that it has **benefited less** from **bull markets**, but this is not surprising as gold is a safe-haven asset and rises when the market falls and investors seek to secure their assets. This is one of the reasons why the ETF has a **much better downside** than its category (-1 ETF and 62 for the category).

Alpha measures the performance of an investment relative to a benchmark. In this case, the ETF has **underperformed** its benchmark by **3.30%**, which may be a cause for concern for investors looking to beat the market.

Beta measures the sensitivity of an investment to market movements. A beta of less than 1, such as that of the ETF, indicates that the investment is generally **less volatile than the market**.

PRICE/EXPENSES/ASSET ALLOCATION

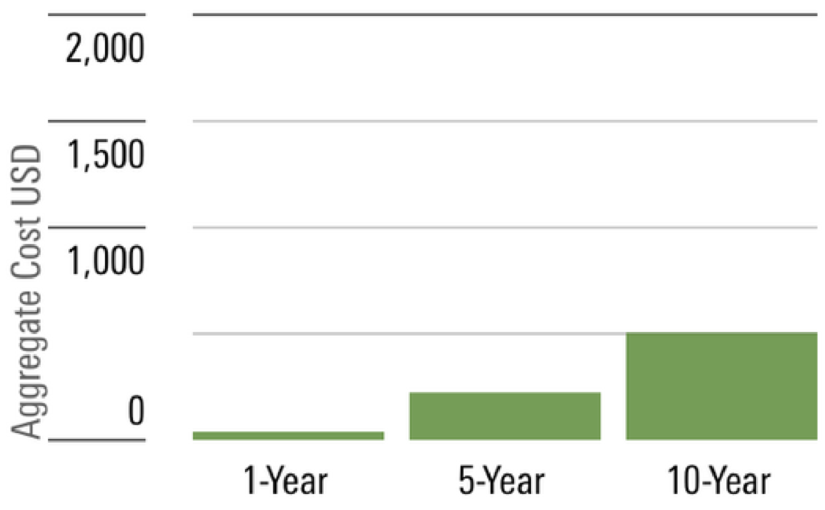
Ongoing Fee Level

Net Expense Ratio

0.400

As of Feb 28, 2022

Cost Illustration (10k; 5% Return; USD)



Fees	1-Yr	5-Yr	10-Yr
Purchase	0	0	0
Ongoing	41	224	505
Sales	0	0	0
Total	41	224	505

Ongoing fees as of Feb 28, 2022. The fees illustrated above do not reflect any additional account-related fees and charges.

Price :
The price of a gold ETF is typically linked to the price of physical gold. Each share of the ETF represents a certain amount of gold and the ETF's price moves in line with changes in the price of gold. For example, if the price of an ounce of gold increases, the price of the gold ETF should also rise.

Ongoing costs :
The **net expense ratio** for the GLD fund's investment option is **0.40%**. This low ratio for the investment option indicates that the fund is **efficient** in terms of **cost management**, allowing investors to retain a **greater share of their returns**.

Cost illustration:
The cost illustration measures the overall cost by referring to a detailed breakdown of costs related to financial transactions, investments, projects, or business operations. For GLD, there is an increase of $464K of the ongoing costs over 10 years.

For **asset allocation**, 100% will be invested in the SPDR® Gold Shares.

PEOPLE

People

Inception Date	Number of Managers	Women on Team %	Longest Tenure	Average Tenure	Advisor(s)
Nov 18, 2004	1	—	18.8 Years	18.8 Years	World Gold Trust Services, LLC

Management Team

Management Team	Nov 18, 2004–Present

The SPDR Gold Trust ETF (GLD), which is one of the most popular ETFs for investing in gold, is managed by **State Street Global Advisors (SSGA)**, a division of State Street Corporation. It is a leading US-based asset management company known for its management of numerous exchange-traded funds (ETFs) and other investment products. State Street Global Advisors is the entity responsible for the day-to-day management of GLD, including the purchase, holding and securing of the physical gold underlying the ETF.
The Gold Etf has only 1 founder.

Graham Tuckwell founded ETF Securities, a pioneering firm in the ETF industry, and in 2003, ETF Securities introduced the first gold ETF known as "Gold Bullion Securities" (ticker: GBS), which was listed on the Australian Stock Exchange (ASX).
Graham Tuckwell's innovative work in creating the first gold ETF played a significant role in revolutionizing the way investors access and invest in gold. Gold ETFs have since become a popular and widely used investment vehicle for gaining exposure to the price of gold without the need to physically own and store the metal.

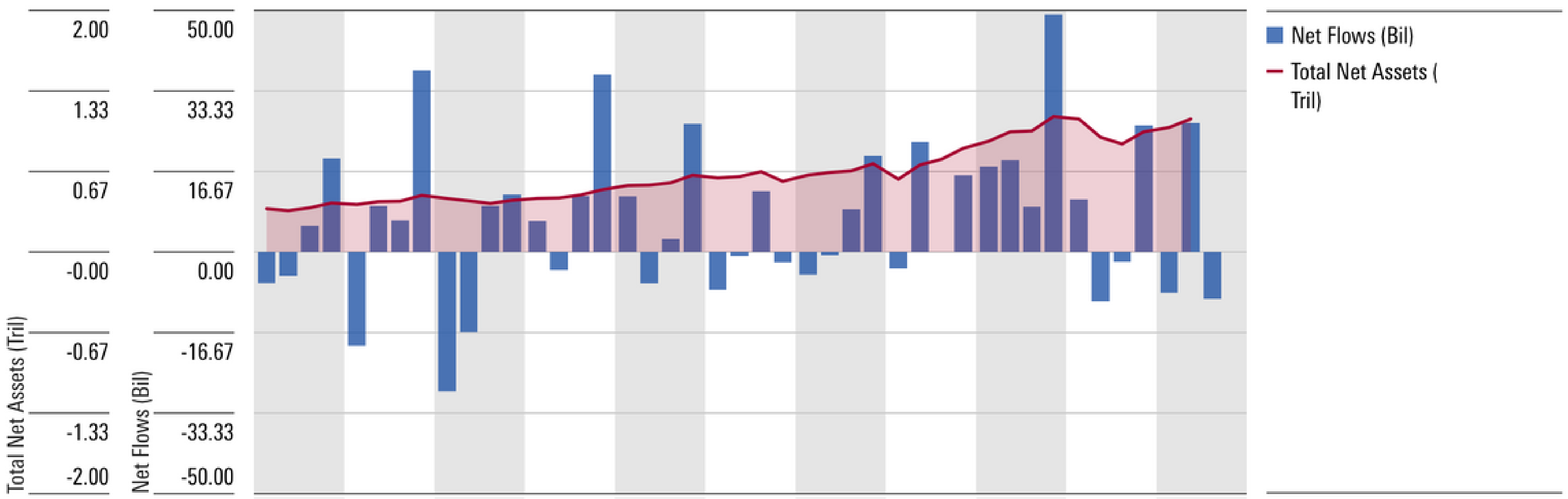
Team seniority :
The average seniority of the management team is 18.8years, reflecting their collective experience.

PARENT

Parent

Firm Name	Market	Total Net Assets	Investment Flows (TTM)	Asset Growth Rt (TTM)	# of Investments	Mgr Retention Rate (5 Years)
State Street	US ETFs	1.09 Tril	33.94 Bil	3.52%	137	93.86

Investment Flows



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
Net Flows USD Bil	13.44	34.40	-24.03	51.01	34.31	1.73	23.39	35.27	95.34	24.76	8.57
Total Net Assets USD Tril	0.39	0.46	0.41	0.50	0.62	0.57	0.72	0.84	1.11	0.98	1.09
Growth Rate %	4.08	8.78	-5.28	12.32	6.84	0.28	4.09	4.91	11.28	2.23	0.87
Industry Market Share %	23.02	22.70	20.37	19.63	18.08	16.81	16.18	15.35	15.26	15.03	–
Number of Investments	125	145	160	166	153	140	142	143	144	141	141

YTD as of Aug 31, 2023

Investment flows (TTM):
Over the past twelve months (TTM), State Street experienced net intflows of $33.94B. (This can be the result of various factors, such as withdrawals, strategy changes or market conditions.)

Asset Growth Rate (AGR):
State Street's asset growth rate over the past twelve months was 3.52%. While this indicates a slight increase, based on 1.09 trillon of total net assets.

Manager Retention Rate (5 years):
With a five-year manager retention rate of 93.86%, State Street demonstrates its ability to retain key talent.

Market share in industry:
The GLD fund's market share in industry has decreased by -34.7%, witch is consequent, from 17.37% in 2013 to 26.71% in 2022.

Number of Investments:
The fund's portfolio has grown over the years, with a 12.8% increase in the number of investments, from 125 in 2013 to 141 in 2022.

ISHARES GLOBAL CLEAN ENERGY ETF

iShares®

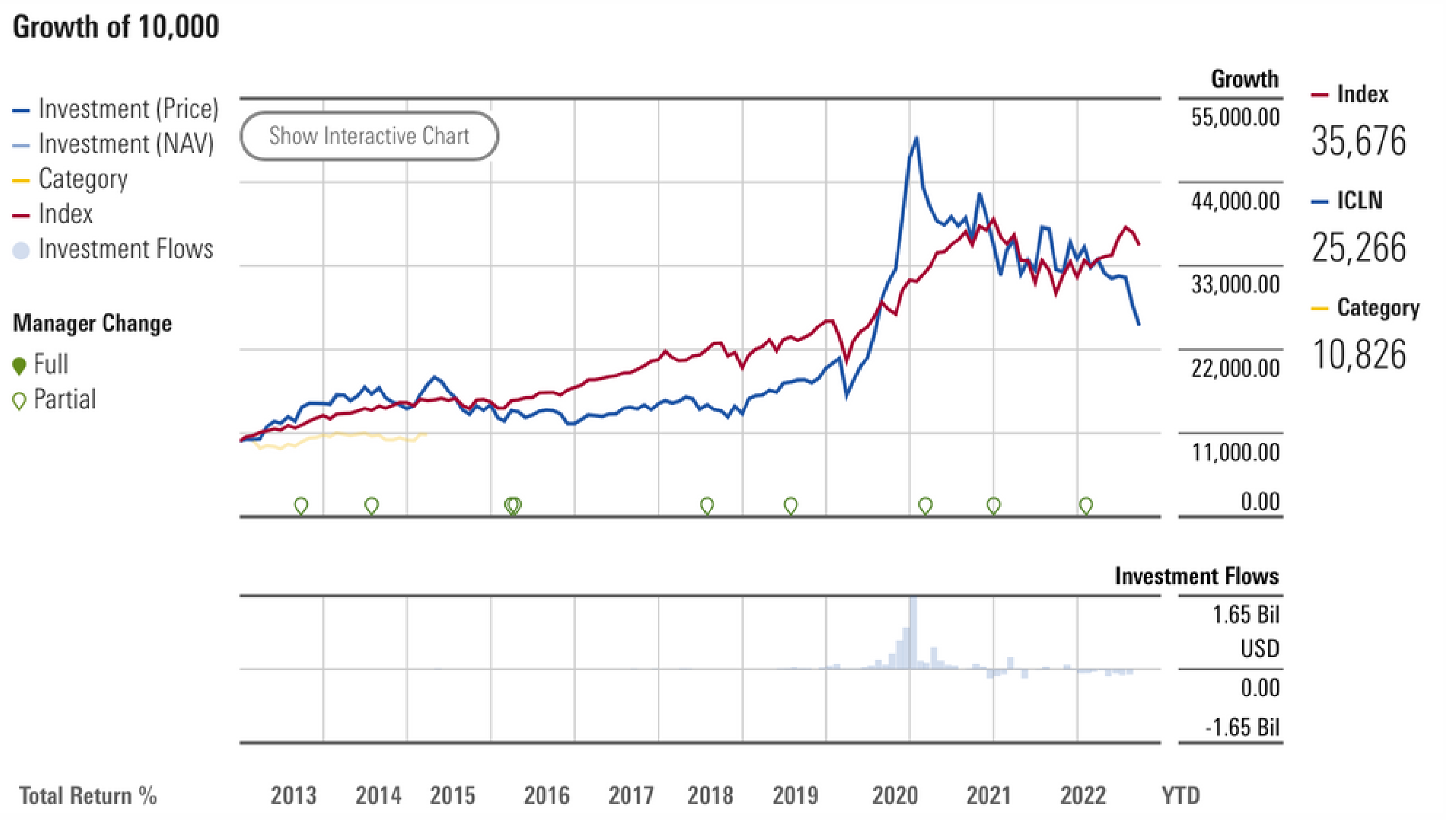
The iShares Global Clean Energy ETF aims to provide investors with exposure to global companies active in the clean energy sector. It is managed by BlackRock, one of the world's largest asset managers. Here are some key facts about the ICLN ETF:

Clean energy exposure: The ICLN ETF allows investors to participate in the transition to cleaner, more sustainable energy sources. It invests primarily in companies involved in technologies and activities related to renewable energy, energy efficiency and other aspects of clean energy.

Geographic diversification: This ETF offers exposure to companies around the world. It is not limited to the US, which means that investors can access a wide range of opportunities in the clean energy sector, regardless of geographic markets.

Growth potential: With the increasing trend towards renewable energy and the focus on reducing carbon footprints, the clean energy sector has strong long-term growth potential. The ICLN ETF is therefore attractive for investors wishing to participate in this growth.

QUOTE AND HISTORICAL PERFORMANCE



NAV 14.64	**Open Price** 14.65	**Bid / Ask / Spread** 14.30 / 14.80 / 3.44%	**Volume / Avg** 3.2 Mil / 2.5 Mil
Day Range 14.44 – 14.70	**Year Range** 14.44 – 21.43	**SEC Yield** 1.16%	**12-Month Yield** 1.00%
Adj. Expense Ratio 0.410%	**Expense Ratio** 0.410%	**Total Assets** 3.1 Bil	**Category** US Fund Miscellaneous Sector

iShares Global Clean Energy ETF (ICLN) Evolution - 2008 to 2023

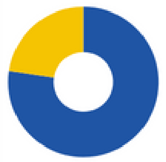
- **2008-2012:** Modest beginnings, stability in 2013-2015, followed by losses in 2014-2015.
- **2016-2017**: Rebound due to the increasing adoption of renewable energies.
- **2018-2019**: Volatility, losses in 2018, significant gains in 2019.
- **2020**: Exceptional year with the COVID-19 pandemic, boosting the demand for clean energy.
- **2021-2022:** Negative performances due to concerns about valuations and political uncertainties.
- **2023:** Negative performances due to economic uncertainties.
- Continued volatility in the clean energy sector.

- **High Volume**: The average daily trading volume of 2.5 million shares signifies a consistent interest despite variable performance.
- **Moderate Volatility in 2023**: The daily price range displays relatively moderate daily volatility in 2023, although the price range over the year remains significant.
- **Modest Yields**: Performance metrics, such as a 1.16% SEC yield and a 1.00% 12-month yield, indicate moderate returns for investors.
- **Affordable Management Fees**: The management expense ratio of just 0.410% is favorable for investors, minimizing associated costs.
- **Substantial Fund Size**: With total assets of $3.1 billion, ICLN maintains a major presence despite recent volatility.

These data underscore ICLN's enduring appeal to investors, despite the challenges and volatility in the renewable energy market over recent years.

HOLDINGS

Holdings | Equity | Others



Portfolio Holdings	No.	%
Equity Holding	99	77.34
Bond Holding	0	0.00
Other Holding	29	22.66

% Assets in Top 10 Holdings	Reported Turnover %	Women Directors %	Women Executives %
48	51.00 As of 04/30/23	27	20

Portfolio Holdings ICLN

More ICLN Holdings >

Current Portfolio Date	Equity Holdings	Bond Holdings	Other Holdings	% Assets in Top 10 Holdings
Sep 27, 2023	99	0	29	47,9

Top 10 Holdings	% Portfolio Weight	Market Value USD	Sector
First Solar Inc	8,26	259 470 575	Technology
Consolidated Edison Inc	7,09	222 602 542	Utilities
Enphase Energy Inc	6,67	209 559 520	Technology
Vestas Wind Systems A/S	4,71	148 032 537	Industrials
Iberdrola SA	4,54	142 484 731	Utilities
SolarEdge Technologies Inc	4,30	135 031 605	Technology
China Yangtze Power Co Ltd Class A	3,54	111 307 812	Utilities
EDP - Energias de Portugal SA	3,12	97 841 844	Utilities
Chubu Electric Power Co Inc	2,95	92 581 885	Utilities
Orsted A/S	2,75	86 419 293	Utilities

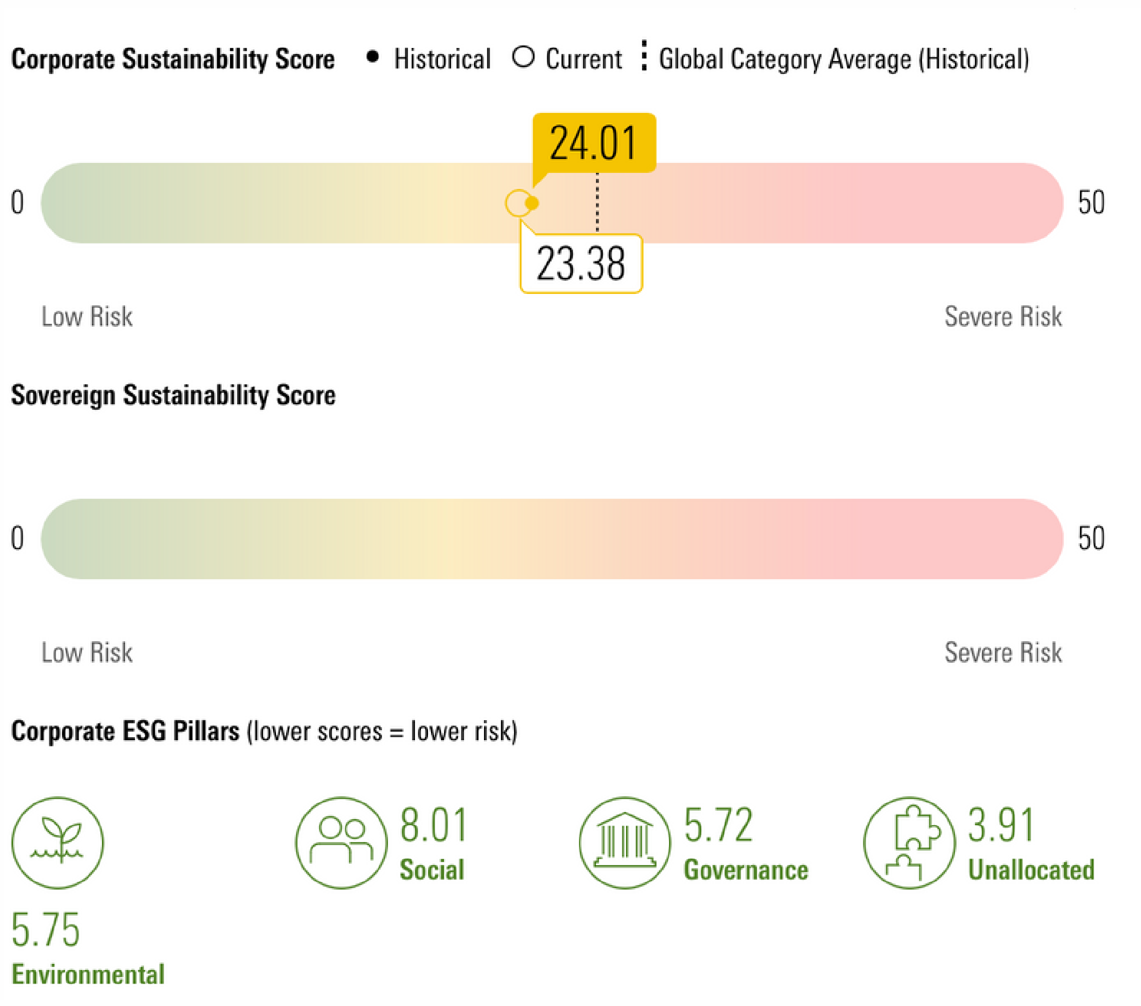
- **Countries of Origin:** Companies in the portfolio come from various countries around the world, offering international exposure to the renewable energy sector. This includes the **United States**, where many companies are based, **Europe** with key players in wind and solar energy, **China** playing a significant role in hydroelectric and solar energy production, **Japan** contributing to clean electricity supply, and **Israel** involved in solar energy optimization solutions.

- **Business Sectors**: The portfolio covers a wide range of clean energy-related sectors, including solar, wind, hydroelectric, green hydrogen, geothermal, and more. This reflects a commitment to transitioning to cleaner and sustainable energy sources.

Top Companies in the Portfolio:

- **First Solar Inc (8.26%)**: A leader in solar panel manufacturing, based in the United States.
- **Consolidated Edison Inc (7.09%)**: A utility company providing electricity and gas, based in the United States.
- **Enphase Energy Inc (6.67%)**: Specializing in residential solar energy systems, based in the United States.
- **Vestas Wind Systems A/S (4.71%)**: A major wind turbine manufacturer, based in Denmark.
- **Iberdrola SA (4.54%):** A key player in renewable energy, based in Spain.

STRATEGY AND SUSTAINABILITY



The iShares Global Clean Energy ETF (ICLN) is a sustainable investment powerhouse with a **4-star sustainability rating**, signifying a strong commitment to environmental, social, and governance (ESG) principles. It boasts a **perfect corporate sustainability contribution of 100%**, reflecting its focus on responsible business practices.

While primarily dedicated to corporate sustainability, it maintains a diverse portfolio of 94 investments across the global category. The "Sustainable Investment" confirmation underscores its alignment with sustainability and ESG criteria.

A consistent historical corporate sustainability score and strong ESG pillars across environmental, social, and governance aspects showcase its dedication to ethical and responsible investment practices.

This ETF provides an attractive option for investors seeking to align their portfolios with sustainability and ESG values.

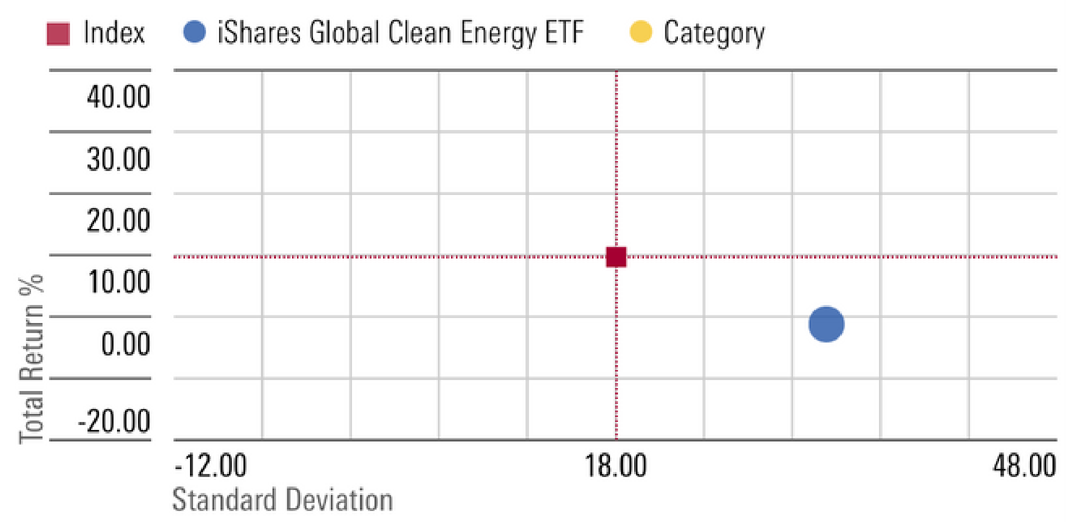
RISK

Risk & Volatility Measures

Trailing	Investment	Category	Index
Alpha	-5.65	—	-0.83
Beta	1.15	—	1.01
R^2	36.18	—	99.37
Sharpe Ratio	0.06	—	0.50
Standard Deviation	32.32	—	18.06

USD | Investment as of Aug 31, 2023 | Index: Morningstar US Market TR USD as of Aug 31, 2023 | Calculation Benchmark: MSCI ACWI NR USD

Risk/Return Analysis



Market Volatility Measures

Capture Ratios	Investment	Category	Index
Upside	66	—	98
Downside	94	—	101

Drawdown	Investment %	Category %	Index %
Maximum	-44.64	—	-24.88

Drawdown Peak Date	Drawdown Valley Date	Max Drawdown Duration
Feb 01, 2021	Aug 31, 2023	31 Months

USD | Capture Ratios as of Aug 31, 2023 | Category: Miscellaneous Sector | Index: Morningstar US Market TR USD | Calculation Benchmark: MSCI ACWI NR USD | Drawdown as of Aug 31, 2023

Alpha: Alpha measures the risk-adjusted performance of a fund compared to its benchmark. A negative alpha indicates underperformance relative to the benchmark. In this case, the iShares ETF has an alpha of -5.65, suggesting underperformance.

Beta: Beta measures a fund's sensitivity to movements in the benchmark. A beta greater than 1, like the ETF's beta of 1.15, signifies higher volatility compared to the benchmark, implying higher risk.

R^2: R^2 is the coefficient of determination that measures the correlation between the ETF's movements and the benchmark's movements. An R^2 of 36.18% indicates that 36.18% of the variation in the ETF's returns can be explained by the benchmark. A lower R^2 suggests that the ETF does not closely track the benchmark.

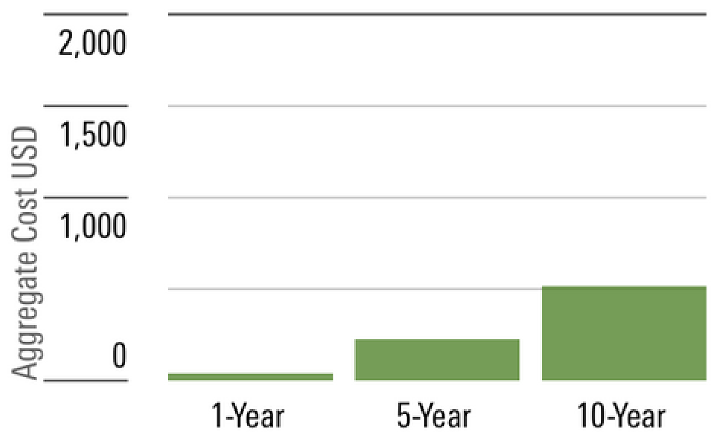
Sharpe Ratio: The Sharpe Ratio assesses risk-adjusted return. A higher Sharpe Ratio indicates better risk-adjusted returns. The iShares ETF has a Sharpe Ratio of 0.06, while the benchmark has a Sharpe Ratio of 0.50, suggesting that the benchmark offers better risk-adjusted returns.

Standard Deviation: Standard Deviation measures return volatility. Higher volatility is typically associated with increased risk. The iShares ETF has a standard deviation of 32.32, whereas the benchmark has a standard deviation of 18.06, indicating that the ETF is more volatile, thus implying higher risk.

In summary, based on the provided characteristics, the iShares ETF focused on clean energy appears to carry higher risk than its benchmark. It has underperformed the benchmark (negative alpha), exhibits higher volatility (higher beta and standard deviation), shows weaker correlation with the benchmark (lower R^2), and offers lower risk-adjusted returns (lower Sharpe Ratio).

PRICE/EXPENSES

Cost Illustration (10k; 5% Return; USD)



Fees	1-Yr	5-Yr	10-Yr
Purchase	0	0	0
Ongoing	42	230	517
Sales	0	0	0
Total	42	230	517

Ongoing fees as of Sep 01, 2023. The fees illustrated above do not reflect any additional account-related fees and charges.

Ongoing Fee Level

Net Expense Ratio

0.410

As of Sep 01, 2023

1-Year Performance

When analyzing the **iShares Global Clean Energy ETF's** performance over one year, it's important to note that the data indicates zero transaction fees, not an absence of transactions. This suggests investors can trade ETF shares without additional costs. Despite this, the ETF shows relative stability with a current asset under management (AUM) of 42. This modest performance may stem from short-term investor caution, possibly due to specific uncertainties in the clean energy sector.

5-Year Performance

Over five years, the ETF features zero transaction fees, making it more accessible for investors. Although there are no recorded transactions, the current AUM of 230 reflects increasing investor interest. The lack of transaction fees likely signifies a longer-term investment approach, reinforcing confidence in the clean energy sector's long-term potential.

10-Year Performance

Over the past decade, the iShares Global Clean Energy ETF has maintained zero transaction fees while significantly growing its current AUM, now at 517. This consistent growth reflects continued investor confidence in the clean energy sector, strengthening long-term optimism.

In summary, the iShares Global Clean Energy ETF presents an overall positive outlook, particularly over 5 and 10 years. Zero transaction fees enhance liquidity, and the steady AUM growth indicates enduring investor confidence in the clean energy sector. However, short-term performance over 1 year remains modest, suggesting investor caution amid immediate sector uncertainties.

ASSET ALLOCATION

	Sectors	Investment %	Cat %
Cyclical	Basic Materials	3.20	3.92
	Consumer Cyclical	0.00	7.50
	Financial Services	0.00	1.84
	Real Estate	0.00	2.07
Sensitive	Communication Services	0.00	1.03
	Energy	0.00	0.62
	Industrials	13.81	24.24
	Technology	31.69	36.47
Defensive	Consumer Defensive	0.00	0.78
	Healthcare	0.00	5.94
	Utilities	51.29	15.59

Stock Style Map | Weight | Historical

	Value	Blend	Growth
Large	8	21	9
Medium	12	5	25
Small	2	7	12

Weight %
- 50+
- 25–49
- 10–24
- 0–9

Region	Investment %	Cat %
North America	45.78	63.59
United Kingdom	0.27	2.19
Europe Developed	25.65	14.59
Europe Emerging	0.00	0.32
Africa/Middle East	0.77	0.61
Japan	3.16	6.02
Australasia	0.60	1.07
Asia Developed	3.27	2.97
Asia Emerging	14.60	6.81
Latin America	5.89	1.83

Market Cap

Avg Market Cap	Category Avg Market Cap	Index Avg Market Cap
10.13 Bil	14.37 Bil	156.26 Bil

Size	Investment %	Cat. Average %	Index %
Giant	11.17	15.81	41.89
Large	26.10	15.69	32.13
Mid	40.64	33.28	19.91
Small	16.34	15.78	5.93
Micro	3.73	5.63	0.14

USD | Investment as of Sep 27, 2023 | Category: Miscellaneous Sector as of Aug 31, 2023 | Index: Morningstar US Market TR USD as of Aug 31, 2023 | Data is based on the long position of the equity holdings.

Sectors:

The ICLN fund is mainly invested in **Defensive sectors** at **51.29%**, followed by **Sensitive sectors** at **45.5%** and **Cyclical sectors** at **3.2%**. In comparison, the category average is completely different, with **62.36%** in **Sensitive sectors**, **15.33%** in **Cyclical sectors** and **22.31%** in **Defensive sectors**. This sector allocation of the VEIEX fund indicates a **focus** on **Defensive sectors**, especially in **utilities**.

Equity style:

The ETF shows a preference for the **Blend style** among **Large stocks**, with **21%**. For Medium stocks, the **Growth style** is dominant at **25%**, indicating an inclination towards medium-sized companies with **high potential**. Small stocks also show a tendency towards Growth at **12%**. Overall, the ETF seems to favour **Growth stocks**, while maintaining **diversification across styles**.

Country allocation:

The ETF has a preference for **North America** (**45.78%**) due to its **rapid growth in renewable energy**. Investment in Developed **Europe** (**25.65%**) recognises **European leadership in green energy**. The allocation to Emerging **Asia** (**14.60%**) captures the region's **growth potential**, while **Latin America** (**5.89%**) is valued for its **natural resources** in clean energy. These choices reflect a strategy focused on the world's key clean energy zones.

PEOPLE

People

Inception Date	Number of Managers	Women on Team %	Longest Tenure	Average Tenure	Advisor(s)
Jun 24, 2008	3	—	15.3 Years	9.3 Years	BlackRock Fund Advisors

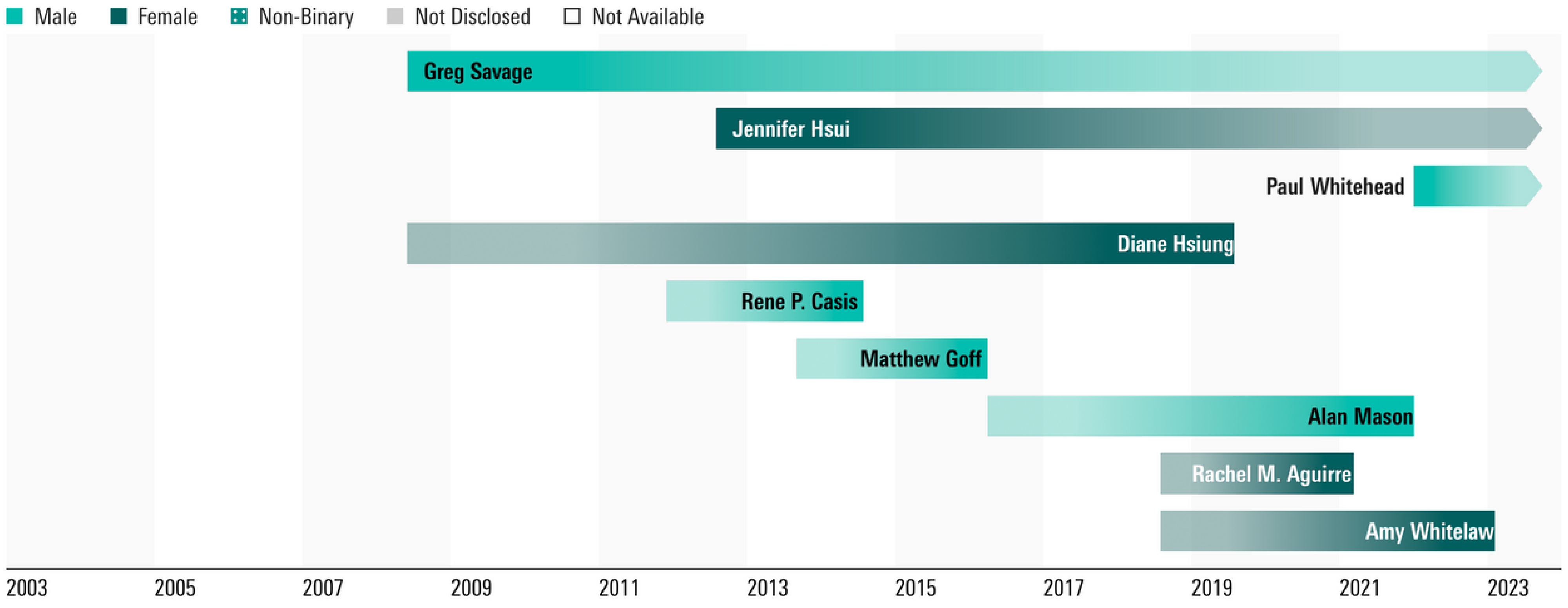
Management Team

Manager	Tenure
Greg Savage	Jun 24, 2008–Present
Jennifer Hsui	Aug 01, 2012–Present
Paul Whitehead	Jan 01, 2022–Present

Position in Investment

0 10K 50K 100K 500K 1M >

Manager Timeline



The ICLN fund is managed by a team of three experienced managers, each of whom brings a unique expertise and perspective to the management of the portfolio.

Greg Savage:

Mr. Savage is a key player in the management team. With the **longest tenure of 15.3 years**, his experience and in-depth knowledge of the market are essential to the overall strategy and performance of the fund.

Team seniority :

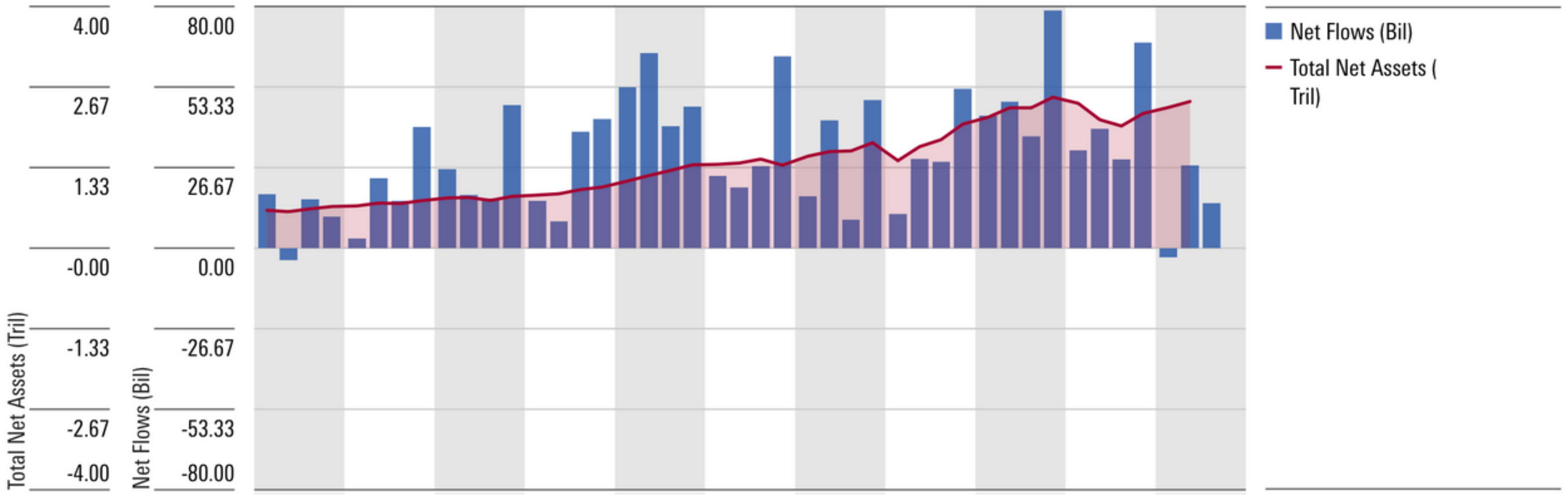
The average seniority of the management team is **9.3 years**, reflecting their **collective experience** and **in-depth knowledge of the sector**.

PARENT

Parent

Firm Name	Market	Total Net Assets	Investment Flows (TTM)	Asset Growth Rt (TTM)	# of Investments	Mgr Retention Rate (5 Years)
iShares	US ETFs	2.42 Tril	117.12 Bil	5.42%	389	90.07

Investment Flows



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
Net Flows USD Bil	40.64	82.27	107.66	105.84	205.16	134.66	117.91	122.13	208.08	169.45	39.33
Total Net Assets USD Tril	0.66	0.76	0.83	0.98	1.35	1.35	1.72	2.02	2.47	2.20	2.42
Growth Rate %	7.30	12.45	14.18	12.77	20.87	9.97	8.76	7.11	10.28	6.86	1.79
Industry Market Share %	38.86	37.85	40.74	38.45	39.24	39.53	38.71	36.78	34.01	33.71	–
Number of Investments	301	328	344	348	349	365	361	391	389	396	391

YTD as of Aug 31, 2023

Investment flows (TTM):

Over the last twelve months (TTM), the ETF saw net inflows of $117.12 billion. These positive flows can be attributed to **increased investor confidence**, **strong performance** or an **attractive investment strategy**.

Asset Growth Rate (AGR):

The ETF's asset growth rate over the last twelve months was **5.42%**. This indicates solid expansion, particularly given the already considerable asset base of **$2.42 trillion**.

Manager Retention Rate (5 years):

With a five-year manager retention rate of **90.07%**, the ETF demonstrates its ability to retain key talent. A high retention rate is often a sign of a **strong corporate culture** and job satisfaction among managers.

Market share in industry:

ETF's market share in the industry has fallen slightly from **38.86%** to **33.71%** in recent years. However, it maintains a **significant presence** in the **industry**.

Number of Investments:

The ETF portfolio has evolved over the years, with an increase in the number of investments. It has grown from **301 investments** in **2013** to **391** in **2022**, representing **growth** of almost **30%**.

GLOBAL ASSET MANAGEMENT

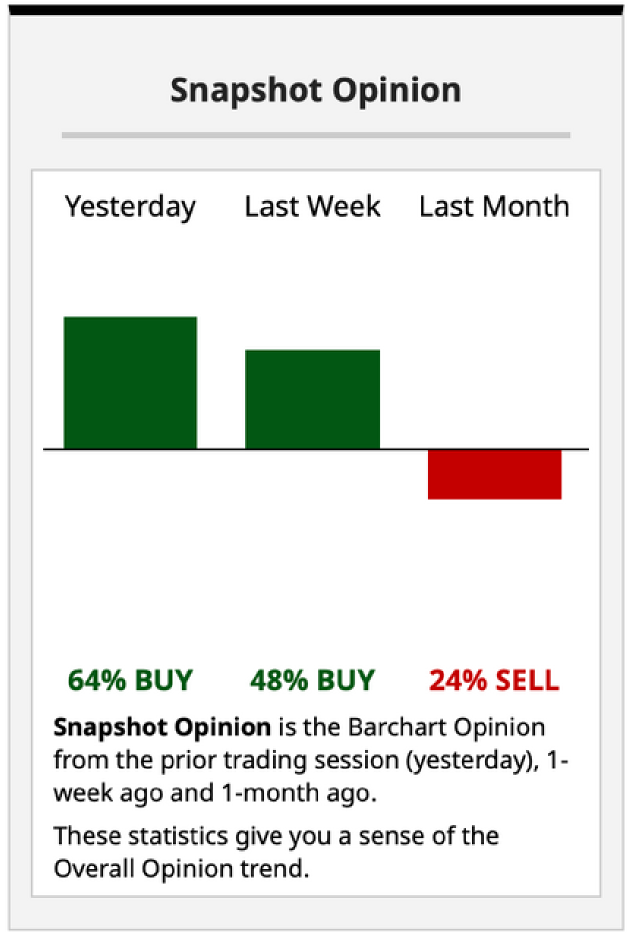
GROUP F

Doriane Duteil, Océane Rozniatowski,
Titouan Clément, Basile Arthaud,
Hugo Moissonnier, Charles Milliand,
Charles Blethon.

CONTENT

FUTURE 1

BITCOIN



Bitcoin futures are contracts that fix the price of bitcoin for a future date. They are used to hedge against bitcoin fluctuations, but above all to speculate on its evolution.

To study the futures market, we decided to focus on the Bitcoin contract for December 2023. As the image shows, this contract has **some notable variations that merit our attention**. Recently, the bitcoin edged down upward by **2.76%** on the previous close. Indicators such as volume and open interest also give us an insight into recent activity on this contract.

The "Snapshot Opinion" section attracts our particular attention: it shows **bullish sentiment** with strong buy **recommendations**. This could suggest that market players believe bitcoin could rise in the short term.

FUTURE SPECIFICATIONS

Bitcoin Micro Dec '23 (BAZ23)

31,560 +1,420 (+4.71%) 11:15 CT [CME]

31,395 x 5 31,625 x 5

CONTRACT SPECIFICATIONS for Mon, Oct 23rd, 2023 Alerts Watch Help

Barchart Symbol	BA
Exchange Symbol	MBT
Contract	Bitcoin Micro Futures
Exchange	CME
Tick Size	5 points ($0.50 per contract)
Margin/Maintenance	$715/650
Daily Limit	Dynamic Price Fluctuation Limits with a 10% dynamic variant
Contract Size	0.1 Bitcoin
Months	All Months
Trading Hours	5:00p.m. - 4:00p.m. (Sun-Fri) (Settles 3:00p.m.) CST
Value of One Futures Unit	$0.1
Value of One Options Unit	$0.1
Last Trading Day	Last Friday of the contract month

EXCHANGE:

Bitcoin futures, using the MBT ticker on select exchanges, enable investors to speculate on Bitcoin's future price. The MBT is prominent on major derivatives exchanges, known for their liquidity and transparency. This allows traders to hedge against price shifts or capitalize on market trends without owning the actual cryptocurrency.

EXPLANATION OF THE SYMBOL J6Z23:

The "BAZ23" symbol breaks down as follows: "BA" stands for Bitcoin futures, which represent the speculative value of Bitcoin's future price. "Z" indicates the month of December and "23" the year 2023. Together, they identify this specific Bitcoin futures contract for December 2023.

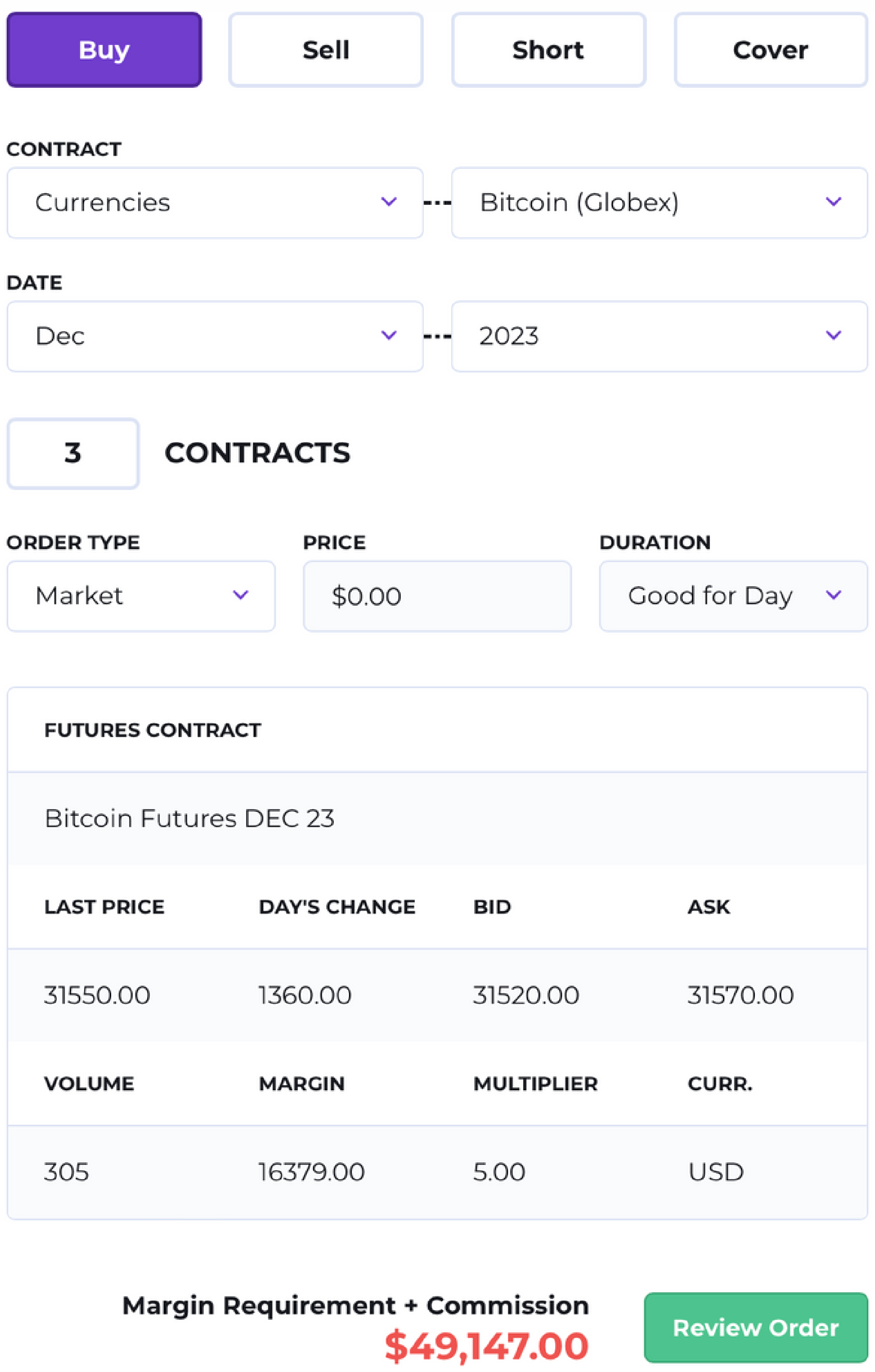
LAST TRADING DAY:

The contract expires on the last Friday of the contract month. This means that the last trading day is Friday 29th December 2 18

TRADING TIMES:

From 5:00 pm to 4:00 pm US time (Sunday-Friday), settling at 3:00 pm CST. This is equivalent to 12:00 am to 11:00 am (Monday-Saturday) French time. This allows French operators to trade from the early morning and throughout most of the day.

FUTURE SPECIFICATIONS



Bitcoin	
contract	5 bitcoins
stocktrack margin	$ 16 379
number of contracts	3
investment	20 bitcoins
Market Price	$ 31 550
investment $	$ 631 000
Stocktract Investment	$ 49 147
leverage	0,77

CONTRACT SIZE:

Each Bitcoin futures contract represents a notional value of 5 Bitcoins. This means each contract corresponds to a substantial exposure to the performance of Bitcoin.

NUMBER OF CONTRACTS:

We have chosen to invest in 3 Bitcoin futures contracts. This results in a total exposure of 15 Bitcoins (3 contracts x 5 Bitcoins of notional value per contract) to the performance of Bitcoin.

INVESTMENT AMOUNT:

The margin requirement for this investment is 20 Bitcoins. This is the amount we need to set aside as collateral to cover our investment, taking into account a Bitcoin price of $ 31,550. Including commission, the total cost for our investment is $49,147.00.

LEVERAGE CALCULATIONS:

The leverage for our Bitcoin futures investment is approximately 0.77 (15 Bitcoins / 20 Bitcoins), indicating that our exposure to the Bitcoin price is 0.77 times the margin requirement. Leverage is an important factor to monitor, as it can amplify both gains and losses.

FUNDAMENTAL RESEARCH

ARTICLE 1

Bitcoin (BTC) Pumping Back to ETF Rumor High, No Smoke Without Fire? Daily fx - Fri Oct 20

In the face of growing conviction that a Bitcoin ETF is imminent, we're seeing a significant rise in the largest cryptocurrency in terms of market capitalization this week. Rumors, even if untrue, such as the one about the BlackRock ETF being approved by the SEC, have led to a surge in BTC. However, the market's bearish reaction to this false information was moderate, perhaps reflecting increased investor confidence. Furthermore, Bitcoin's technical trend this week is decidedly bullish. The important 200-day moving average was convincingly breached, transforming earlier resistance into a support level. With a series of higher lows and highs, a bullish outlook can be supported. Next resistance is identified around $31,000, before reaching the 2023 peak at $31,796. Considering Bitcoin's impressive performance this year, up over 80%, and its dominant role in the cryptocurrency market, accounting for almost 51.5% of total market capitalization, we might be tempted to adopt a positive stance. Moreover, the fact that Bitcoin has outperformed Ethereum suggests its relative strength in the market.

ARTICLE 2

Morgan Stanley: Crypto winter is over; Bitcoin's rise is coming, *Laura Sánchez - Investing.com - Mon Oct 23*

According to a recent report from Morgan Stanley's wealth management division, the crypto-currency sector appears to be entering a recovery phase. Analyst Denny Galindo compares the crypto-currency cycle to a four-year cycle, representing the four seasons. The summer phase begins with halving, when the creation of new bitcoins is halved, stimulating demand and leading to significant price increases. This phase is followed by a similar period in autumn, when new investors and companies take an interest in bitcoin, culminating in a bull market. After a peak, the market enters a winter phase, characterized by a price correction and community introspection. The report indicates that the market low generally occurs 12 to 14 months after the peak, providing a timeline for market cycles. A key factor is also the extent to which prices have fallen relative to the historical peak, with declines of around 83% in previous crypto winters. Morgan Stanley suggests that the "cryptowinter" could be behind us, signalling a potential recovery for crypto-currencies.

FUNDAMENTAL RESEARCH

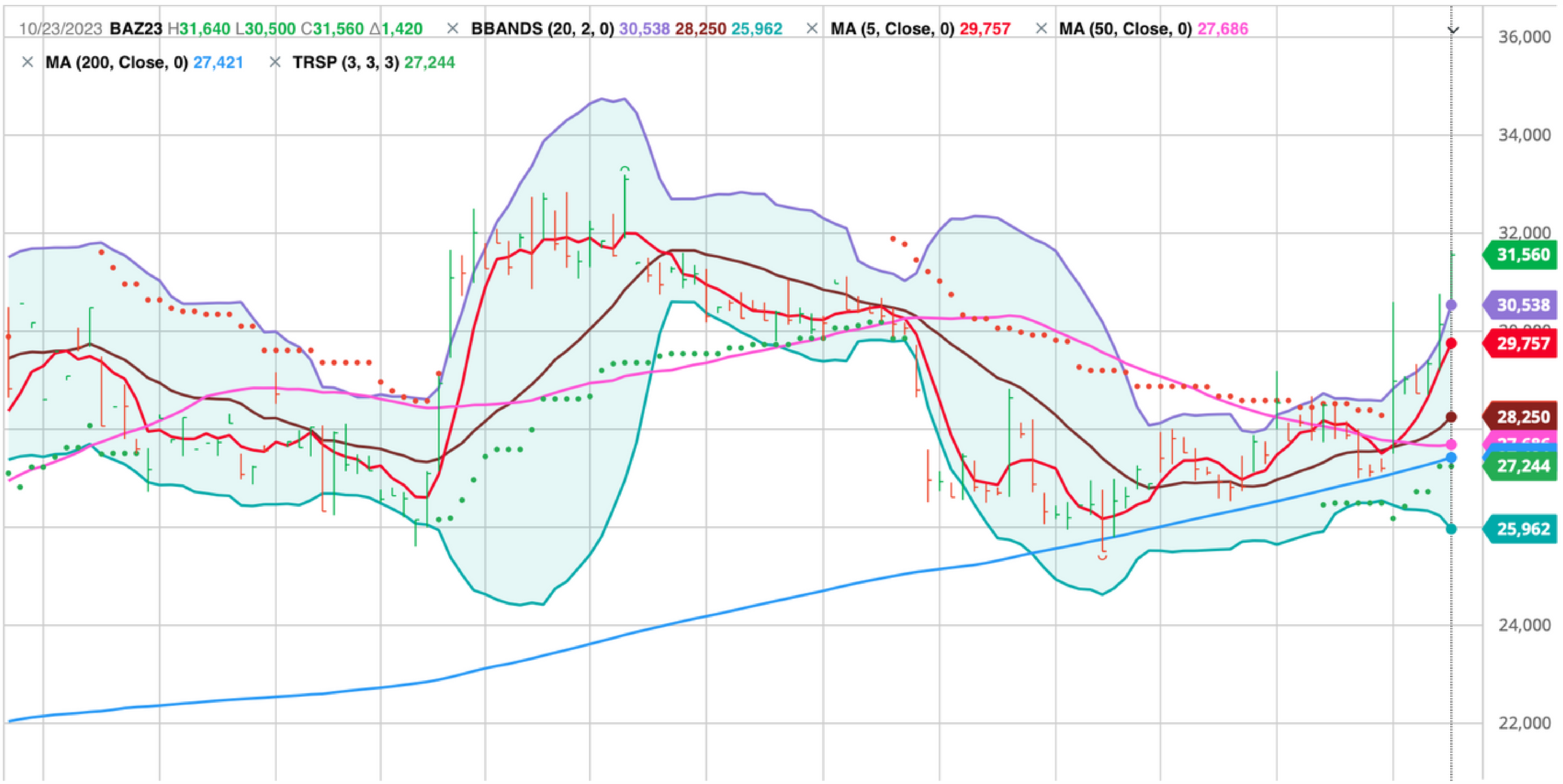
CONCLUSION

Both articles highlight positive signs for the Bitcoin market. The first highlights Bitcoin's recent rise due to rumours of the imminent approval of a Bitcoin ETF, even though these rumours turned out to be false. Despite this, the market reacted moderately, indicating increased investor confidence. Moreover, Bitcoin's technical indicators are optimistic, with a convincing break of the 200-day moving average and a marked uptrend.

The second article features analysis from Morgan Stanley suggesting that the crypto-currency sector is entering a recovery phase after the crypto winter. Analyst Denny Galindo compares the crypto-currency cycle to a four-year cycle, with summer and autumn bull phases followed by a winter correction phase. According to the report, this winter phase appears to be coming to an end, and historical cycles point to a possible recovery in the future.

In conclusion, these two articles, based on technical analysis and historical data, suggest a positive and optimistic sentiment for Bitcoin. Investors appear to be gaining confidence, and signs of a recovery in the crypto-currency market, combined with interest from institutional investors (as discussed in the first article), have the potential to drive Bitcoin higher for the foreseeable future. However, it is important to note that crypto-currency markets are volatile and investors should exercise caution in their financial decisions.

REQUIRED TECHNICAL ANALYSIS



MOVING AVERAGES (MA) :

MA5 (29.757): Currently above MA50, indicating short-term bullish momentum.
MA50 (27.686): Located between MA5 and MA200, indicating consolidation.
MA200 (27.421): Below the other two, indicating that the long-term trend remains bullish.

BOLLINGER BANDS (BBANDS):

Upper band: 30.538
Middle band: 28.250
Lower band: 25.962
The current value is close to the median band, indicating relatively stable market conditions.

TREND SEEKER (TRSP):

Value: 27.244
TRSP is below the current price, which could suggest an upward trend. However, as the difference is small, a trend reversal is possible in the short term.

REQUIRED TECHNICAL ANALYSIS

VOLUME:

There was a significant increase in trading volume, dominated mainly by **purchases (green bars)**.

RSISTO:

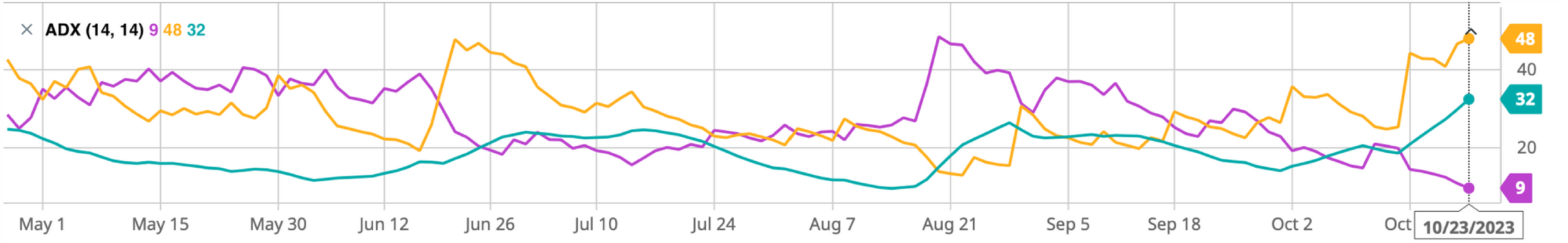
The indicator is currently in an overbought zone with a value close **to 0.966, suggesting overbought conditions**. It has shown significant fluctuations in recent periods.

MACD:

This indicator is currently showing an **upward trend** with the **MACD line (610)** above the **signal line (483)**. Meanwhile, the **histogram** shows a value of **127**, suggesting a continuation of this **upward trend**.

Combining these analyses, the market is showing signs of volatility, with a recent increase in volume dominated by buying. Prices are currently close to the median of the Bollinger Bands. Although the MACD indicates an upward trend, the positive histogram suggests a continuation of this trend. The RSISTO is currently in an overbought zone, indicating potentially overbought conditions. Overall, the market could be in a consolidation phase, with a possible continuation of the uptrend to watch.

OTHER TECHNICAL ANALYSIS TOOL



The Average Directional Index (ADX) is a technical indicator that measures the **strength of a trend**, regardless of its direction. Generally speaking, an ADX **value above 20 indicates a strong trend**, while a value below 20 suggests a market in a **sideways phase or with no clear trend**. In addition to the ADX, the DI+ and DI- indicators provide information on the direction of the trend: a DI+ above the DI- indicates an uptrend, while the opposite suggests a downtrend.

On this chart, ADX has a value of 32, indicating a consolidating trend. According to the generally accepted interpretation of ADX, a value above 20 indicates a strong trend, without giving any indication of the direction of that trend. In our case, the DI+ line is at 9 and the DI- is well above 48. The DI+ and DI- lines provide directional information. When the DI- is significantly higher than the DI+, as is the case here, this indicates a downward trend.

In conclusion, although the ADX shows a strengthening trend, the DI+ and DI- lines clearly indicate sales force dominance. The current trend is therefore dominated by sales.

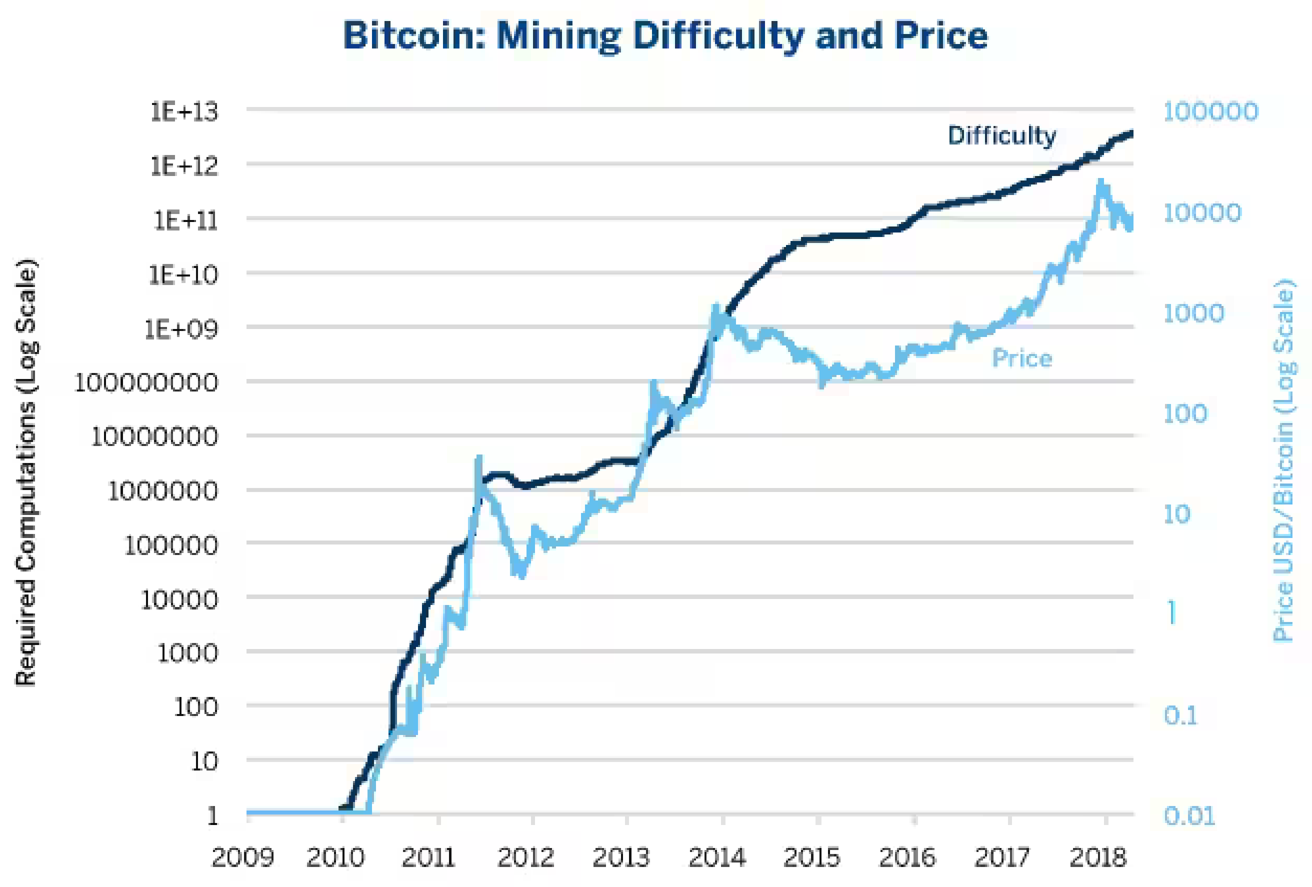
SUPPLY AND DEMAND

BITCOIN'S LIMITED SUPPLY

Bitcoin is famous for its limited supply. Unlike traditional government-issued currencies, Bitcoin has a fixed cap of 21 million coins. This means that there are a finite number of Bitcoins in the world. This intrinsic scarcity creates a unique supply and demand dynamic.

GROWING DEMAND

Demand for Bitcoin comes from a variety of sources. Investors see Bitcoin as a potentially lucrative digital asset, while others use it as a way to transfer value across borders without the interference of traditional financial institutions. In addition, the growing adoption of crypto-currencies in the business world has also boosted demand for Bitcoin.



Source: https://blockchain.info/charts/market-price?timespan=all and https://blockchain.info/charts/difficulty?timespan=all

IMPACT ON PRICE

When demand for Bitcoin increases, particularly when large institutions or individual investors flock to the market, the price of Bitcoin tends to rise in response. Scarcity due to limited supply acts as an amplifier, often causing significant upward price movements.

It is important to note that the Bitcoin market is extremely volatile. Rapid price fluctuations are often influenced by unforeseen events, government regulations and even announcements by public figures. These external factors can quickly alter the balance between supply and demand, leading to significant price fluctuations in a short space of time.

In conclusion, the complex interplay between supply and demand is an essential element of the Bitcoin market. Scarcity due to limited supply and increasing demand from a variety of sources create a delicate balance that influences the price and value of Bitcoin. As adoption continues to grow and more investors enter the market, it is likely that the interplay between supply and demand will continue to shape the future of Bitcoin in significant ways.

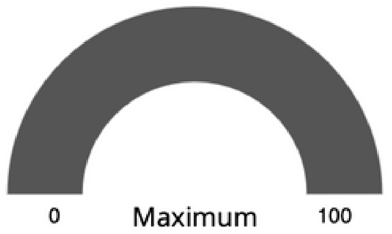
SHORT OR LONG CHOICE

Overall Average:

72% BUY

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the

Current Strength



Current Direction

INDICATOR

Opinion | **Strength & Direction**

Composite Indicator	Signal	Strength	Direction
Trend Seeker®	BUY	Maximum	Strongest
Short Term Indicators			
7 Day Average Directional Indicator	BUY	Maximum	Strongest
10 - 8 Day Moving Average Hilo Channel	BUY	Strong	Strongest
20 Day Moving Average vs Price	BUY	Maximum	Strongest
20 - 50 Day MACD Oscillator	BUY	Soft	Strongest
20 Day Bollinger Bands	BUY	Strong	Strongest
20 - Day Average Volume: 73			**Average: 100% BUY**
Medium Term Indicators			
40 Day Commodity Channel Index	BUY	Strong	Strongest
50 Day Moving Average vs Price	BUY	Maximum	Strongest
20 - 100 Day MACD Oscillator	SELL	Weak	Weakest
50 Day Parabolic Time/Price	BUY	Strong	Strongest
50 - Day Average Volume: 52			**Average: 50% BUY**
Long Term Indicators			
60 Day Commodity Channel Index	BUY	Strong	Strongest
100 Day Moving Average vs Price	BUY	Average	Strongest
50 - 100 Day MACD Oscillator	SELL	Average	Strongest
100 - Day Average Volume: 33			**Average: 33% BUY**

Recent technical analysis of the Bitcoin market shows several key indicators. The moving averages (MAs) indicate a short-term uptrend, with the MA5 above the MA50, while the MA200 indicates a long-term uptrend. The Bollinger Bands show relatively stable market conditions, with the price close to the median of the bands. The Trend Seeker suggests a possible uptrend, although the difference is minimal, leaving room for a possible short-term reversal. Trading volume has increased recently, mainly due to heavy buying.

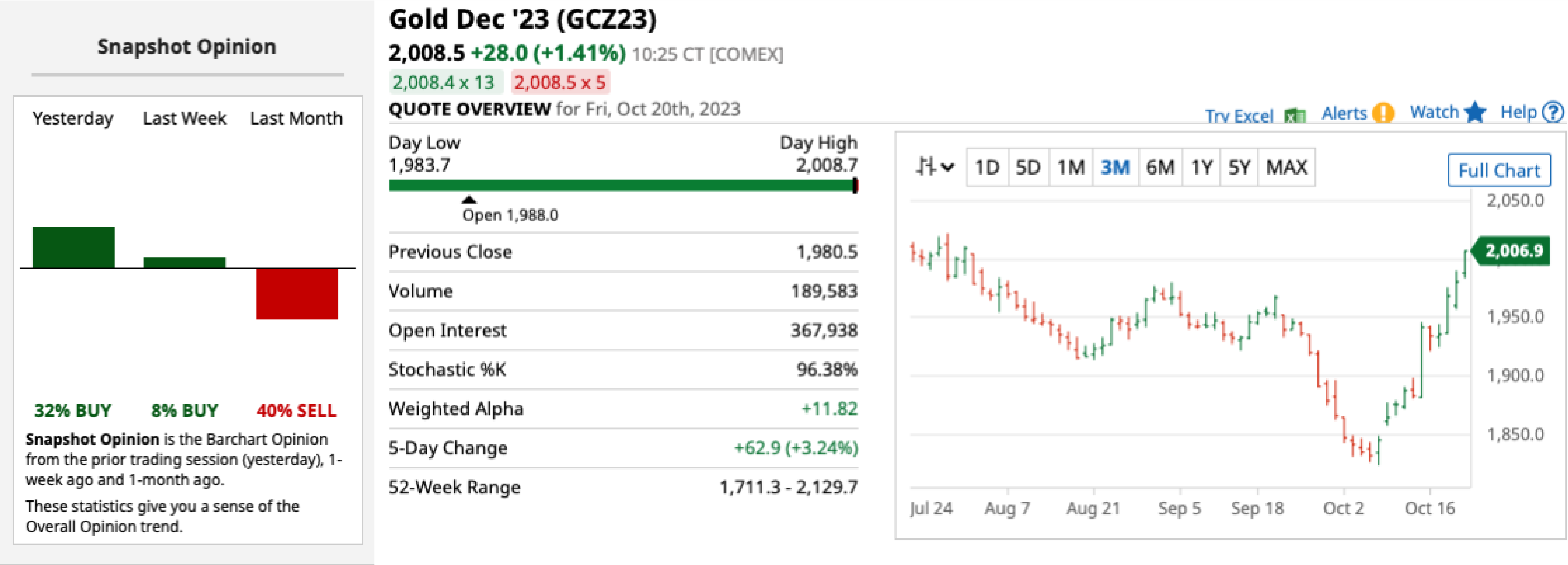
However, the RSISTO indicator is showing overbought conditions, while the MACD is showing an uptrend, with a possible continuation. The Average Direction Index (ADX) shows a consolidation trend, but with a clear dominance of selling forces, along the DI+ and DI- lines.

In addition, our fundamental analysis highlights the recent rise due to rumours of ETF approval, while the second, based on Morgan Stanley's analysis, points to the possible end of the crypto winter. Investors are gaining confidence, buoyed by positive technical indicators and growing interest from institutions, which could drive Bitcoin higher in the short to medium term. However, the volatility of the market requires investors to be cautious.

Against this backdrop, we recommend taking a long (buy) position in Bitcoin. However, it is still important to implement appropriate risk management strategies and to monitor the market carefully for any rapid developments.

FUTURE 2

GOLD



Gold futures are contracts that fix the price of gold for a future date. These contracts are commonly used as **hedging instruments** against fluctuations in the price of gold, while also offering **opportunities to speculate on its movements**. They play an essential role in the world of trading, particularly for investors seeking to protect themselves against inflation or economic uncertainty.

In looking at the futures market, we have chosen to focus on the **December 2023 gold futures contract**.

The 'Snapshot Opinion' section attracts particular attention: it shows a **bullish trend** with 32% of recommendations to buy and only 40% to sell. This suggests that the majority of market participants believe that the price of gold could continue to rise in the short term.

FUTURE SPECIFICATIONS

Gold Dec '23 (GCZ23)

2,008.3 +27.8 (+1.40%) 10:28 CT [COMEX]

2,008.3 x 3 | 2,008.4 x 11

CONTRACT SPECIFICATIONS for Fri, Oct 20th, 2023

Alerts Watch Help

Barchart Symbol	GC
Exchange Symbol	GC
Contract	Gold 100-oz
Exchange	COMEX
Tick Size	0.10 (10 cents) per troy ounce ($10.00 per contract)
Margin/Maintenance	$8,580/7,800
Daily Limit	10% above or below previous settlement
Contract Size	100 fine troy ounces
Months	Feb, Apr, Jun, Aug, Oct, Dec (G, J, M, Q, V, Z)
Trading Hours	5:00p.m. - 4:00p.m. (Sun-Fri) (RTH 7:20a.m. - 12:30p.m.) (Settles 12:30p.m.) CST
Value of One Futures Unit	$100
Value of One Options Unit	$100
Last Trading Day	Third last business day of the maturing delivery month

EXCHANGE:

Gold futures are traded on the COMEX, or Commodities Exchange. It is one of the largest derivatives exchanges in the world, offering liquidity and transparency for traders.

EXPLANATION OF THE SYMBOL GCZ23:

The symbol "GCZ23" breaks down as follows: "GC" represents gold, "Z" indicates the month of December, and "23" stands for the year 2023. Together, they identify this specific gold futures contract for December 2023.

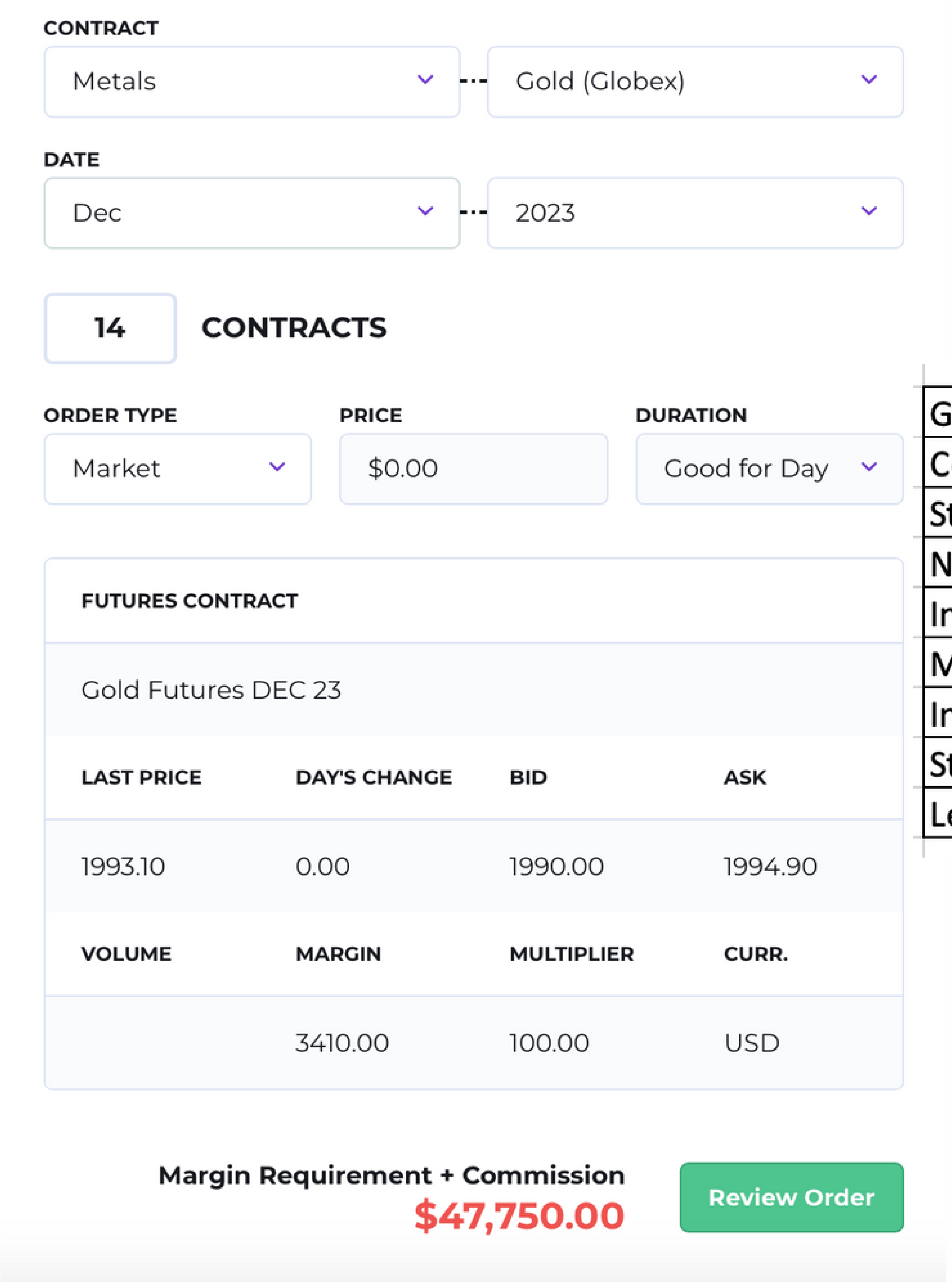
LAST TRADING DAY:

The gold futures contract expires on the last business day of the delivery month, which is Friday, 29th December 2023.

TRADING TIMES:

Gold futures trading takes place from 5:00 p.m. to 4:00 p.m. (Sunday to Friday) US time, which is equivalent to 12:00 a.m. (midnight) to 11:00 p.m. (Monday to Saturday) French time. This allows French traders to trade for most of the day and well into the evening.

FUTURE SPECIFICATIONS



GOLD	
Contract	10 $
Stocktrak Margin	3410 $
Number of contracts	14
Investment	50 000 $
Market Price	1,9931 $
Investment $	99 655 $
Stocktrak Investment	47 750 $
Leverage	2,087

CONTRACT SIZE:

Each Gold futures contract represents a national value of $10 (0,10 points) per contract. This means each contract corresponds to a substantial exposure to the performance of Nasdaq-listed companies.

NUMBER OF CONTRACTS:

We have chosen to invest in 14 Gold futures contracts. This results in a total exposure of $ 50,000 (14 contracts x 3410 $ margin per contract) to the performance of Nasdaq-listed companies.

INVESTMENT AMOUNT:

The margin requirement for this investment is $47,750 (14 x 3410 $ margins) This is the amount we need to set aside as collateral to cover our investment. It's crucial for securing our position.

LEVERAGE CALCULATIONS:

The leverage for our Japanese Yen futures investment is approximately 2,087, indicating that our exposure to the Gold is 2,087 times higher than the margin requirement. To complete the calculation we need to divide the investment in dollars with the Stocktrak investment (99 655 / 47 750). Leverage is an important factor to monitor, as it can amplify both gains and losses.

FUNDAMENTAL RESEARCH

ARTICLE 1

The recent weakness of the dollar, combined with the dovish comments of the Philadelphia and Cleveland Fed presidents, is having a direct impact on the price of gold. When the dollar weakens, gold, which is denominated in dollars, generally becomes more attractive to investors holding other currencies.

Moreover, gold has performed remarkably well, reaching a peak of almost three months. This rise was mainly due to increased demand for safe-haven assets as a result of concerns over the Israel-Hamas conflict. The weakening dollar and falling global bond yields also played in the precious metal's favour.

It is also important to note that the fall in global stock markets has reinforced gold's appeal as a safe haven. However, a note of caution is in order, given the ongoing liquidation of long gold positions by some funds, which could exert downward pressure.

In conclusion, given the current environment - dollar weakness, geopolitical tensions and falling bond yields - we believe it is appropriate to consider buying gold futures. This view is reinforced by the decline in the stock markets, which is increasing demand for safe havens such as gold.

ARTICLE 2

Gold prices recently hit a three-month high, largely due to rising tensions in the Middle East and expectations that Federal Reserve rate hikes may be coming to an end. Gold has always been seen as a safe haven in times of uncertainty, and the intensification of the war between Israel and Hamas reinforces this position.

Comments by Federal Reserve Chairman Jerome Powell suggesting a possible pause in rate hikes, combined with the geopolitical impact, have dampened the rise of the US dollar, boosting gold. Experts predict that gold will continue its upward trajectory, breaking through major technical resistances.

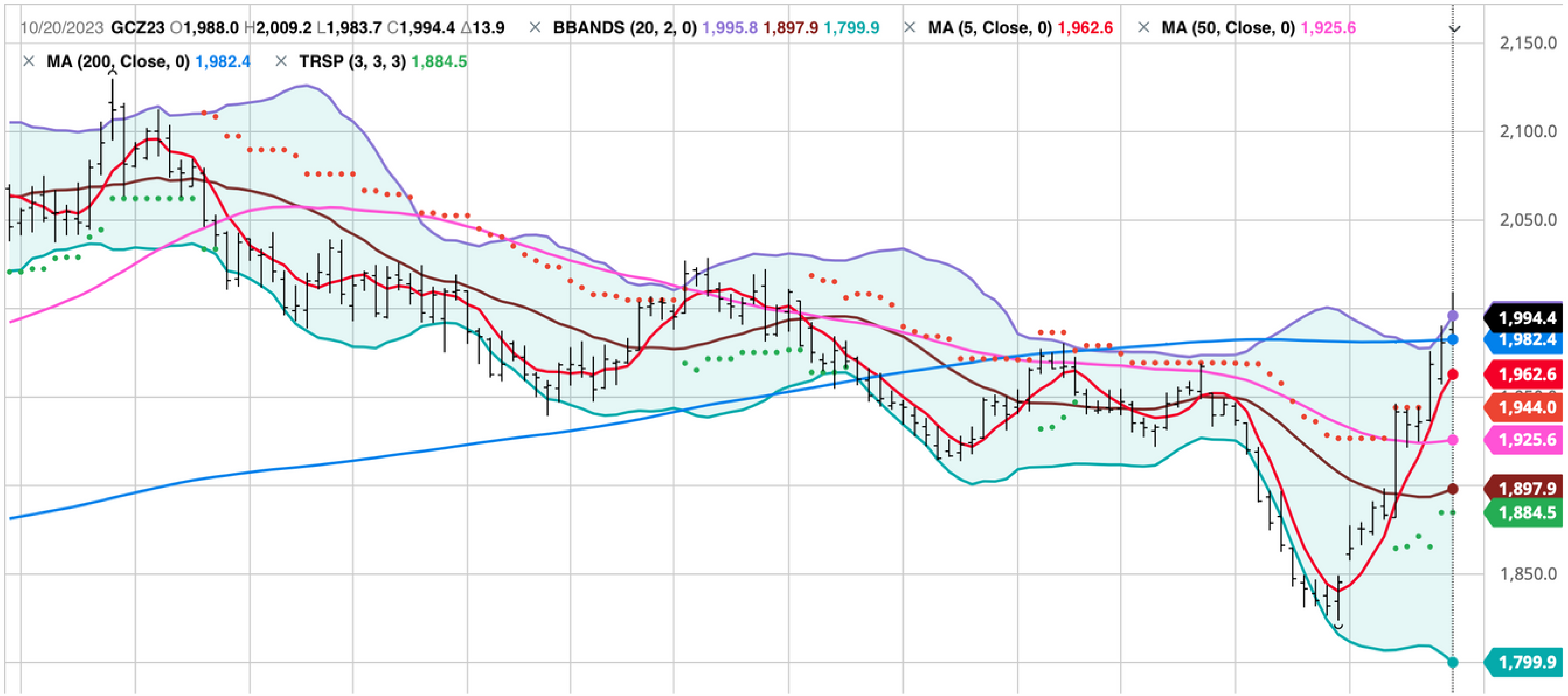
In the face of current tensions and economic fluctuations, gold is an attractive and reliable investment.

FUNDAMENTAL RESEARCH

CONCLUSION

Taking into account the analyses presented in both texts, the fundamental indicators consistently point towards the attractiveness and reliability of gold as an investment option in the current environment. Factors such as the weakened dollar, potential pauses in rate hikes by the Federal Reserve, and ongoing geopolitical tensions, particularly concerning the Israel-Hamas conflict, reinforce gold's longstanding reputation as a safe haven. Additionally, the decline in global stock markets further amplifies the appeal of gold as a safeguard against market uncertainties. Considering these converging indicators from both perspectives, it would be a prudent decision to consider buying gold futures as a strategic move in the present economic landscape.

REQUIRED TECHNICAL ANALYSIS



MOVING AVERAGES (MA):

MA5: Above MA50, indicating short-term bullish momentum.
MA50: Below MA5 but above MA200, indicating possible consolidation.
MA200: Below the other two, suggesting that the long-term trend is bearish.

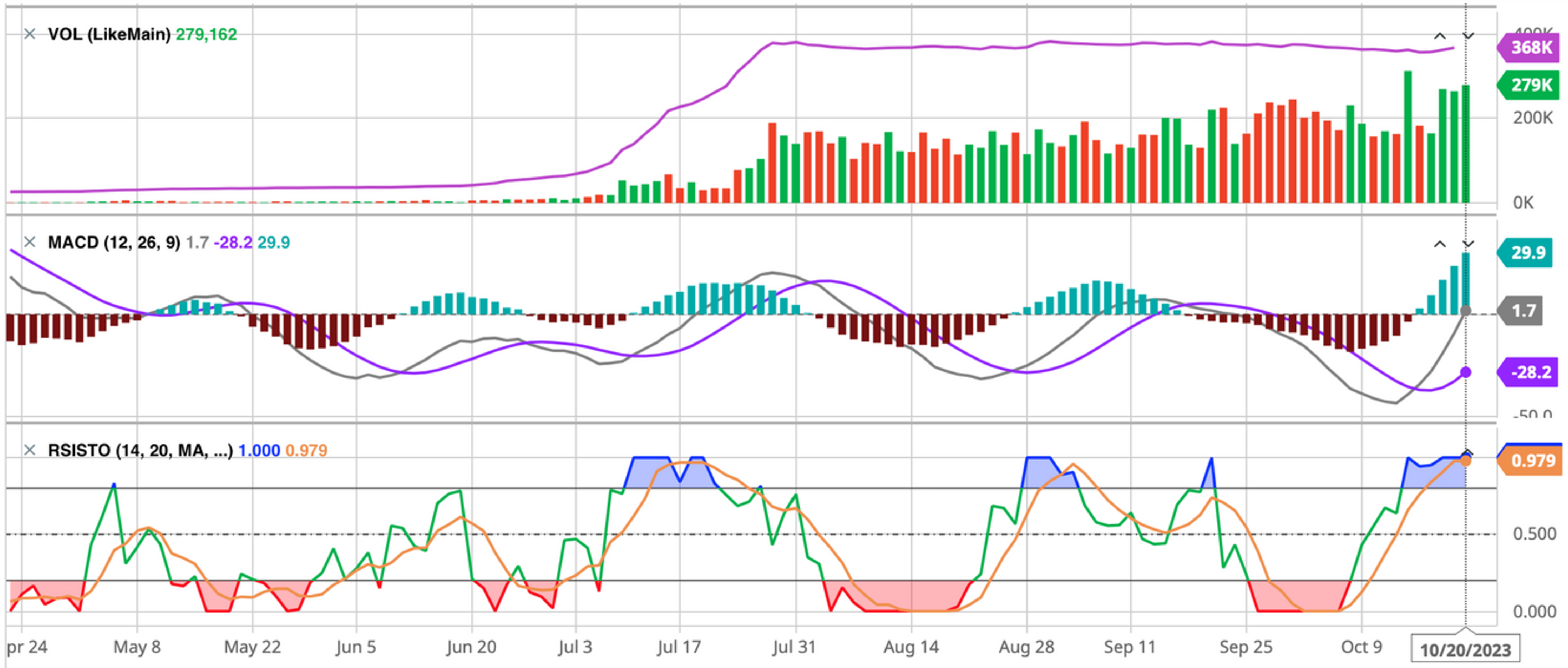
BOLLINGER BANDS (BBANDS):

Upper band: 1,995.8
Median Band: 1,897.9
Lower Band: 1,799.9
The current value is close to the upper band, suggesting that the asset could be overbought in the short term.

TREND SEEKER (TRSP):

Value: 1,884.5
Interpretation:
When TRSP is below the current price, it may suggest an upward trend.

REQUIRED TECHNICAL ANALYSIS



VOLUME:

There was a significant increase in trading, mainly dominated by **purchases** (green bars).

RSISTO:

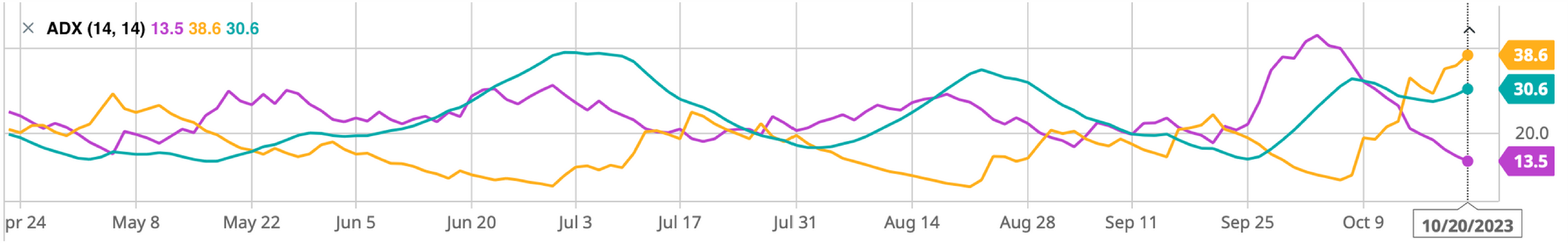
The indicator is in a neutral zone with a value of around 0.979, indicating neither an overbought nor an oversold situation. It has shown steady fluctuations in recent periods.

MACD:

This indicator shows an **upward trend** with the MACD line **above** the **signal line**. However, the gap between the two lines appears to be narrowing, which could indicate a weakening of the upward momentum.

Taken together, the gold market is showing signs of volatility, with volume increasing and prices approaching the upper Bollinger bands. Although the MACD indicates an uptrend, the approaching lines suggest a possible weakening of this momentum. RSISTO remains neutral. Overall, the market could be in a consolidation phase, with a possible trend reversal to watch out for.

OTHER TECHNICAL ANALYSIS TOOL



With a value of 30.6 on this chart, the ADX clearly **indicates a strong trend**, since it exceeds the threshold of 20.

As for the directional indicators, the DI+ is at 13.5 while the DI- is at 38.6. Given that the DI- is much higher than the DI+, this suggests a **dominant downtrend**, indicating that sales forces are much more present than buying forces in the market.

In conclusion, the ADX is showing a strong and clear trend, and the DI+ and DI- lines confirm this downtrend. Investors and traders could interpret this as a sign that the market is currently dominated by sellers.

SUPPLY AND DEMAND

DEMAND:

Gold is often considered a safe-haven asset during times of economic uncertainty. The demand for gold can increase during economic turmoil, currency fluctuations, geopolitical tensions, or inflation.

SUPPLY:

The supply of gold is influenced by mining production, central bank gold sales, recycled gold recovery, and movements in the gold reserves of countries. **Geological and environmental factors can also influence the supply**.

NEWS:

On Friday 20th October 2023, gold rose to $1,980 per ounce, its **highest level in three months**, due to tensions in the Middle East, marking a more than 2% increase for the week despite rising Treasury yields. Jerome Powell, the chairman of the U.S. Federal Reserve, expressed **concerns** about **high inflation**, suggesting it could require a slowdown in economic growth while keeping current monetary parameters. The dollar edged lower due to comments from Fed officials in favor of a pause in interest rate hikes, while increased demand for dollar liquidity was observed due to a decline in stock markets.

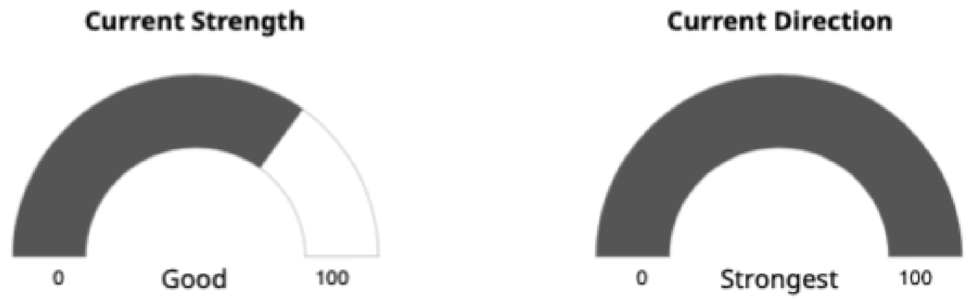
SHORT OR LONG CHOICE

Gold Dec '23 (GCZ23)
2,002.9 +22.4 (+1.13%) 09:56 CT [COMEX]
2,002.7 x 22 2,002.9 x 25
BARCHART OPINION for Fri, Oct 20th, 2023 Tutorial Alerts Watch Help

Overall Average:

56% BUY

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.



Barchart Opinion

INDICATOR	Opinion	Strength & Direction
Composite Indicator		
Trend Seeker®	BUY	
Short Term Indicators		
7 Day Average Directional Indicator	BUY	
10 - 8 Day Moving Average Hilo Channel	BUY	
20 Day Moving Average vs Price	BUY	
20 - 50 Day MACD Oscillator		SELL
20 Day Bollinger Bands	BUY	
20 - Day Average Volume: 207,585		**Average: 60% BUY**
Medium Term Indicators		
40 Day Commodity Channel Index	BUY	
50 Day Moving Average vs Price	BUY	
20 - 100 Day MACD Oscillator		SELL
50 Day Parabolic Time/Price	BUY	
50 - Day Average Volume: 174,740		**Average: 50% BUY**

According to our in-depth analysis of gold futures for December 2023, several indicators are converging towards a bullish trend. The "Snapshot Opinion" section shows a predominantly pro-buy market, with **32%** of recommendations to **buy** and only **40% to sel**l. What's more, the moving averages point to short-term upward momentum, with the MA5 above the MA50.

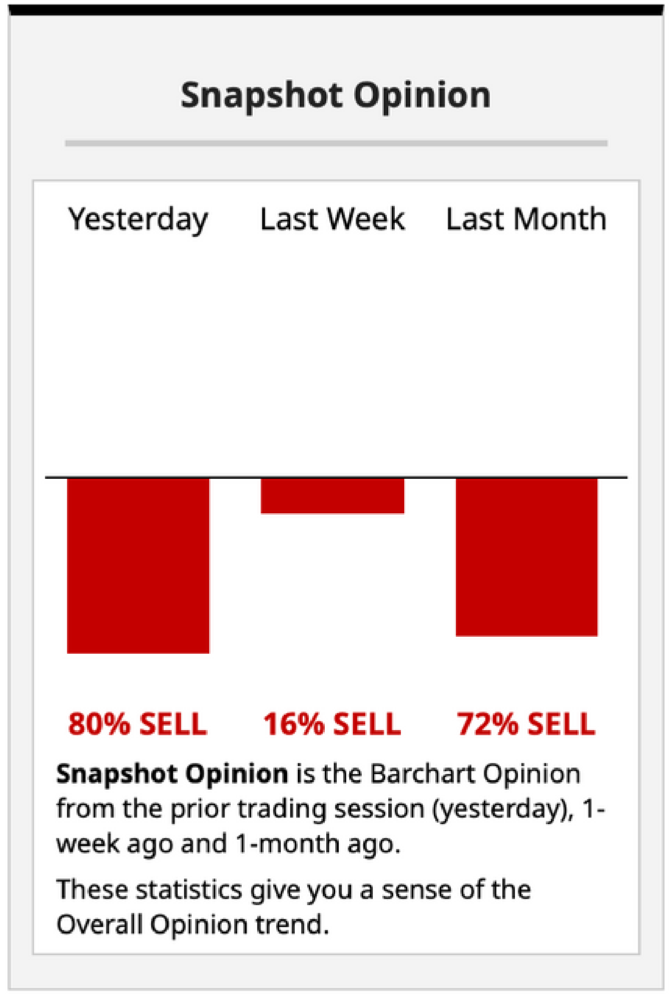
The Bollinger Bands show that the current price is close to the upper band, indicating possible overbought conditions, but this may also suggest strong demand. The MACD confirms a bullish trend, with the MACD line above the signal line.

"In view of the current economic instability and geopolitical tensions, experts advise investing in gold. Markets are reacting to the fall in US stock market indices due to concerns over the escalation of the **Israeli-Palestinian conflict**. High yields on US Treasuries and signals of tighter monetary policy from the Fed reinforce this recommendation. In this uncertain environment, investors are turning to gold as a safe haven."

Against this backdrop, we recommend a **long (buy) position** in gold futures against the USD. However, it is still important to implement appropriate risk management strategies and to monitor the market carefully for any rapid developments.

FUTURE 3

NASDAQ

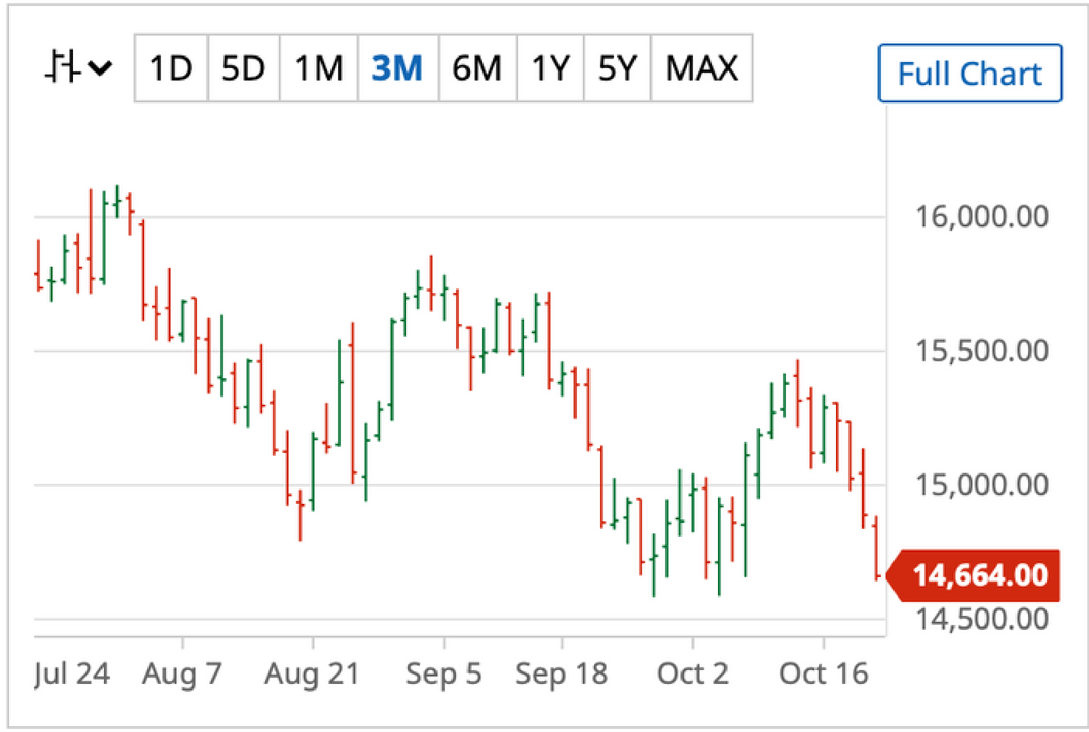


Nasdaq 100 E-Mini Dec '23 (NQZ23)

14,664.00s -226.00 (-1.52%) 10/20/23 [CME]

QUOTE OVERVIEW for Fri, Oct 20th, 2023 Try Excel Alerts Watch Help

Day Low	Day High
14,645.00	14,887.50
	Open 14,850.00
Previous Close	14,890.00
Volume	831,922
Open Interest	252,311
Stochastic %K	30.78%
Weighted Alpha	+20.68
5-Day Change	-456.25 (-3.02%)
52-Week Range	11,118.00 - 16,264.25



NASDAQ futures are contracts that fix the price of the Nasdaq for a future date. They enable investors to diversify their portfolios and spread risk across different asset classes.

To study the futures market, we decided to focus on the Nasdaq futures contract for December 2023. As the image shows, this contract has **some notable variations** that deserve our attention. Recently, due to a number of factors, the Nasdaq fell slightly by **-1.52%** compared with the previous close. Indicators such as volume and open interest also give us an insight into recent activity on this contract.

The 'Snapshot Opinion' section catches our eye in particular: it shows a pronounced bearish sentiment with high sell recommendations. This could suggest that market participants believe the yen could continue to weaken in the short term.

FUTURE SPECIFICATIONS

Nasdaq 100 E-Mini Dec '23 (NQZ23)
14,821.75 -68.25 (-0.46%) 07:33 CT [CME]
14,821.75 x 2 14,822.50 x 4

CONTRACT SPECIFICATIONS for Fri, Oct 20th, 2023 Alerts Watch Help

Barchart Symbol	NQ
Exchange Symbol	NQ
Contract	E-Mini Nasdaq 100
Exchange	CME
Tick Size	0.25 points ($5.00 per contact)
Margin/Maintenance	$18,480/16,800
Daily Limit	7.0%, 13.0% and 20.0% decline below the Settlement Price of the preceding session
Contract Size	$20 times Index
Months	Mar, Jun, Sep, Dec (H, M, U, Z)
Trading Hours	5:00p.m. - 4:00p.m. (Sun-Fri) (Settles 3:00p.m.) CST
Value of One Futures Unit	$20
Value of One Options Unit	$20
Last Trading Day	Third Friday of the contract month

EXCHANGE :

NASDAQ futures are traded on the **CME**, or **Chicago Mercantile Exchange**. It is one of the largest derivatives exchanges in the world, offering liquidity and transparency for traders.

EXPLANATION OF THE SYMBOL NQZ23 :

The symbol "NQZ23" breaks down as follows: "**NQ**" represents NASDAQ, "**Z**" indicates the month of **December**, and "**23**" is the year **2023**. Together, they identify this NASDAQ futures contract for December 2023.

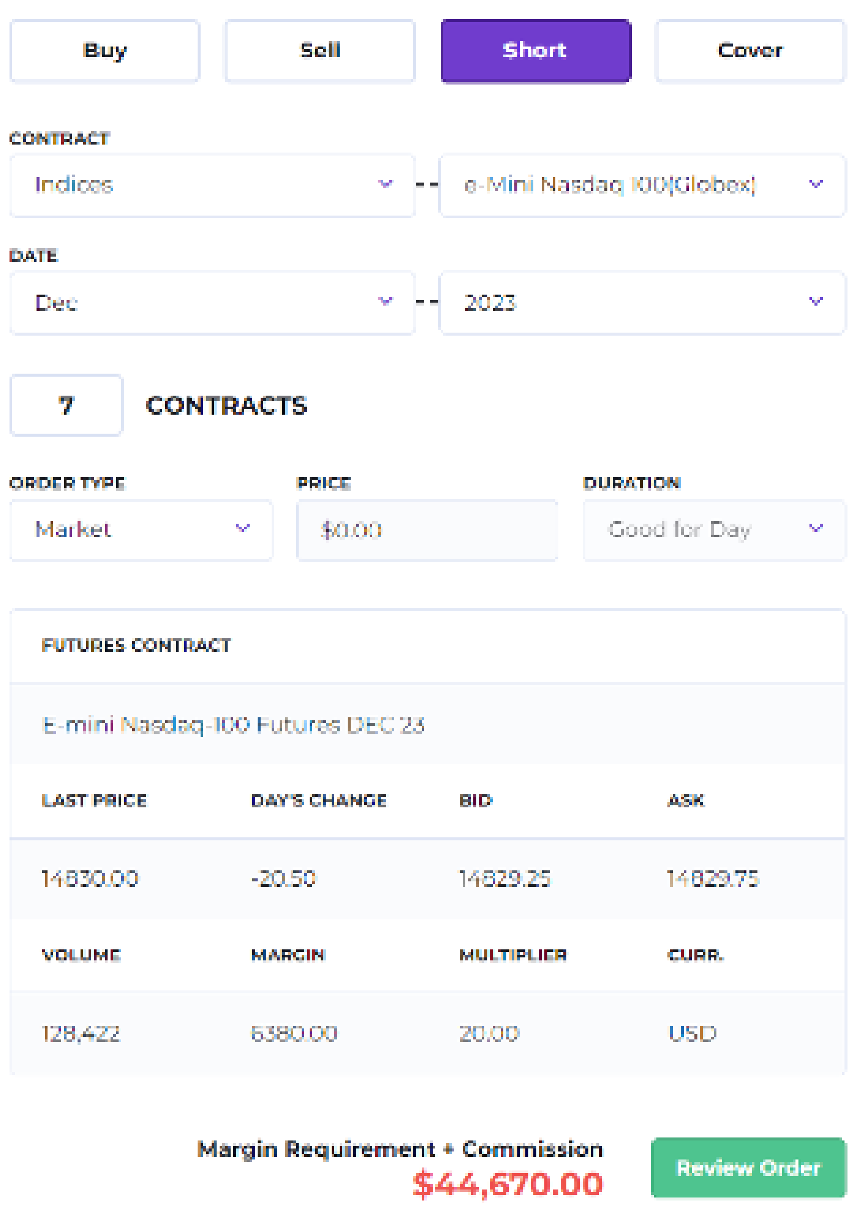
LAST TRADING DAY :

The contract expires on the **third friday** of the contract month. This means that the last day of trading is **Friday 18 December 2023.**

TRADING TIMES:

From **5:00 p.m.** to **4:00 p.m. (Sun-Fri)** US time, which is equivalent to **12:00 a.m.** (midnight) to **11:00 p.m. (Mon-Sat)** French time. This allows French traders to trade throughout most of the day and into the late evening.

FUTURE SPECIFICATIONS



NASDAQ	
Contract	5
Stocktrak Margin	6380 $
Number of contracts	7
Investment	50 000 $
Market Price	1,2842
Investiment $	64 210 $
Stocktrak Investment	44 660 $
Leverage	20

CONTRACT SIZE:

Each Nasdaq futures contract represents a national value of $5 (0,25 points) per contract. This means each contract corresponds to a substantial exposure to the performance of Nasdaq-listed companies.

NUMBER OF CONTRACTS:

We have chosen to invest in 7 Nasdaq futures contracts. This results in a total exposure of $ 50,000 (7 contracts x 6 380$ margin per contract) to the performance of Nasdaq-listed companies.

INVESTMENT AMOUNT:

The margin requirement for this investment is $44,670 (7 x 6 380 margins) This is the amount we need to set aside as collateral to cover our investment. It's crucial for securing our position.

LEVERAGE CALCULATIONS:

The leverage for our Nasdaq futures investment is approximately 20, indicating that our exposure to the Nasdaq-100 index is 40 times higher than the margin requirement.To complete the calculation we need to Determine the national value (5x7 = 35), then the initial capital required (35 x 5% = 1.75). To conclude on the leverage effect (35/1.75 = 20) Leverage is an important factor to monitor, as it can amplify both gains and losses.

FUNDAMENTAL RESEARCH

ARTICLE 1

Given the current market situation, we are seeing a significant fall in the main stock market indices, such as the S&P 500, the Dow Jones Industrials and the Nasdaq 100, which appear to be influenced by concerns about a possible escalation in the Israeli-Palestinian conflict. There was also a technical sell-off after the S&P 500 fell below its 200-day moving average.

At the same time, there has been a rush into safe-haven assets such as gold, which has hit a near three-month high. This trend is corroborated by the fall in crude oil prices following reports suggesting that Israel may delay its ground assault on Gaza.

The geopolitical landscape is intensifying with an increase in drone attacks in Iraq and Syria against US interests and the interception of missiles by a US destroyer. A summit is planned in Cairo with the participation of several Middle Eastern leaders and envoys from China and Germany to discuss the crisis in Gaza.

However, the article also highlights some positive news for equities: a large proportion of S&P 500 companies beat earnings estimates for the third quarter. In addition, several Fed presidents have hinted at a possible pause in interest rate rises, and the market seems to expect the Fed not to raise interest rates before the end of 2024.

ARTICLE 2

According to the article, we are currently in an inflationist period with high debt, creating an environment where equities are struggling to regain traction to resume the bull market. This suggests that the market is more suited to trading than long-term investment.

We also learn that environments with high interest rates are often bearish for equities, meaning that investors generally see lower returns in their equity portfolios. Conversely, in low interest rate environments, equities tend to perform well, and investors generally see better returns.

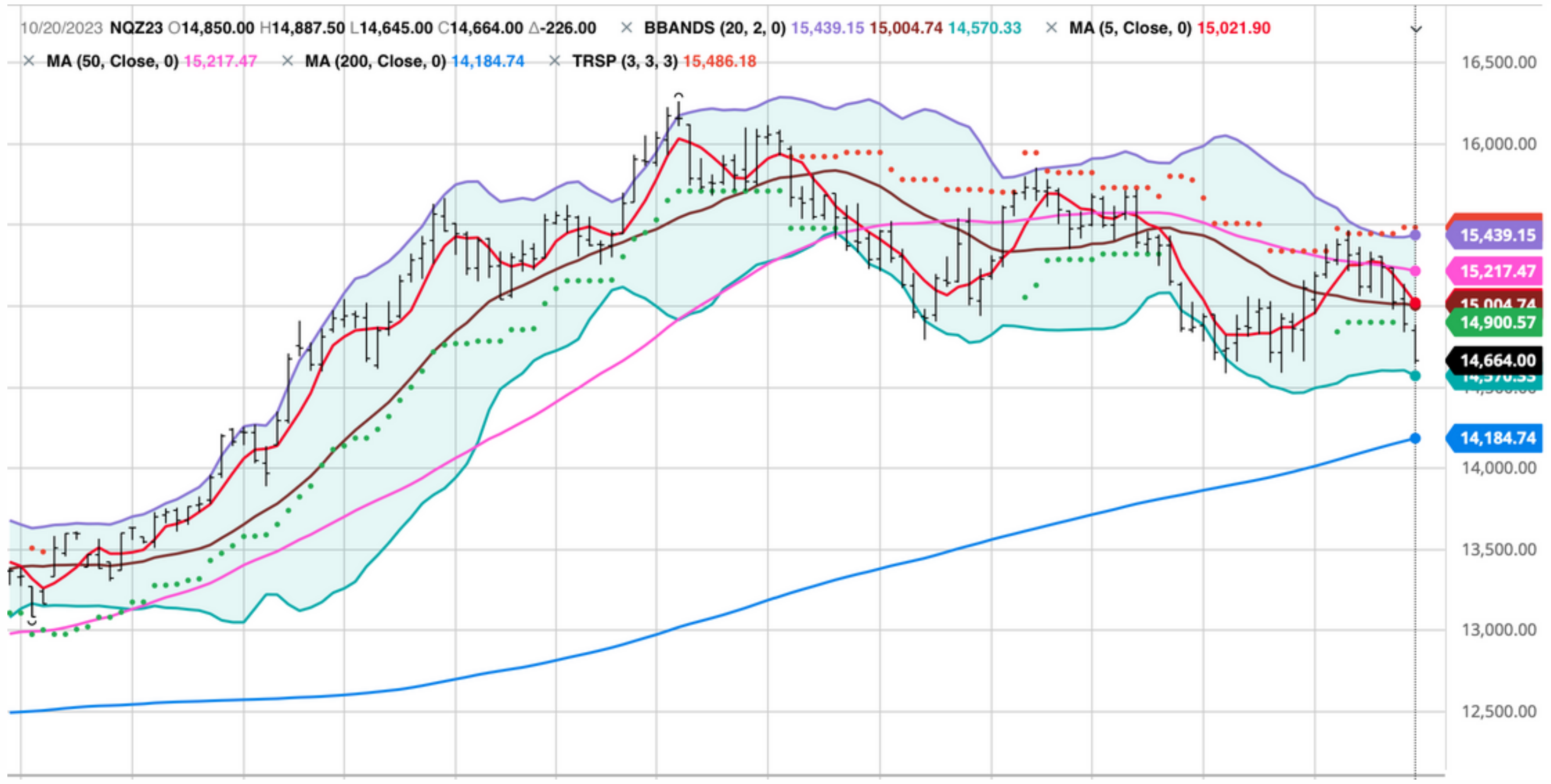
The article then explores the opportunities in the interest rate market, highlighting the pros and cons of cash treasuries and cash ETFs. Cash Treasuries, such as Treasury Bills, are backed by the full faith and credit of the US government, offering a high level of security. ETFs, on the other hand, offer instant diversification but pay no interest as a cash Treasury would.

CONCLUSION

Given the current market turbulence, there are two main prospects. On the one hand, **geopolitical tensions**, particularly around the **Israeli-Palestinian conflict,** are exerting negative pressure on major indices such as the Nasdaq 100. On the other hand, a period of inflation coupled with high levels of debt is causing investors to reassess the relevance of long-term investments, in favor of shorter trading strategies.

In conclusion, determining whether now is a good time to short the Nasdaq is **complex**. While geopolitical tensions and inflationary concerns may argue for a bearish stance in the short term, other signals, such as recent financial performance and monetary expectations, suggest a possible resilience or recovery in the medium term. In this uncertain environment, technical analysis is required.

REQUIRED TECHNICAL ANALYSIS



MOVING AVERAGES (MA):

MA5: The MA5 is situated between the MA50 and the MA200, indicating a neutral stance with no clear short-term trend direction.

MA50: Positioned above the MA5, the MA50 suggests that the intermediate trend has been relatively bullish, especially since the MA5 is above the long-term MA200.

MA200: With its position at 14,184.74, the MA200 is below both the MA5 and MA50. This confirms the longer-term bullish trend, as the current and intermediate moving averages are above this long-term average.

BOLLINGER BANDS (BBANDS):

Upper Band: Located at 14,570.33, the upper band currently sits below the current market price. This indicates that the price is exceeding its typical range and may suggest it's overbought.

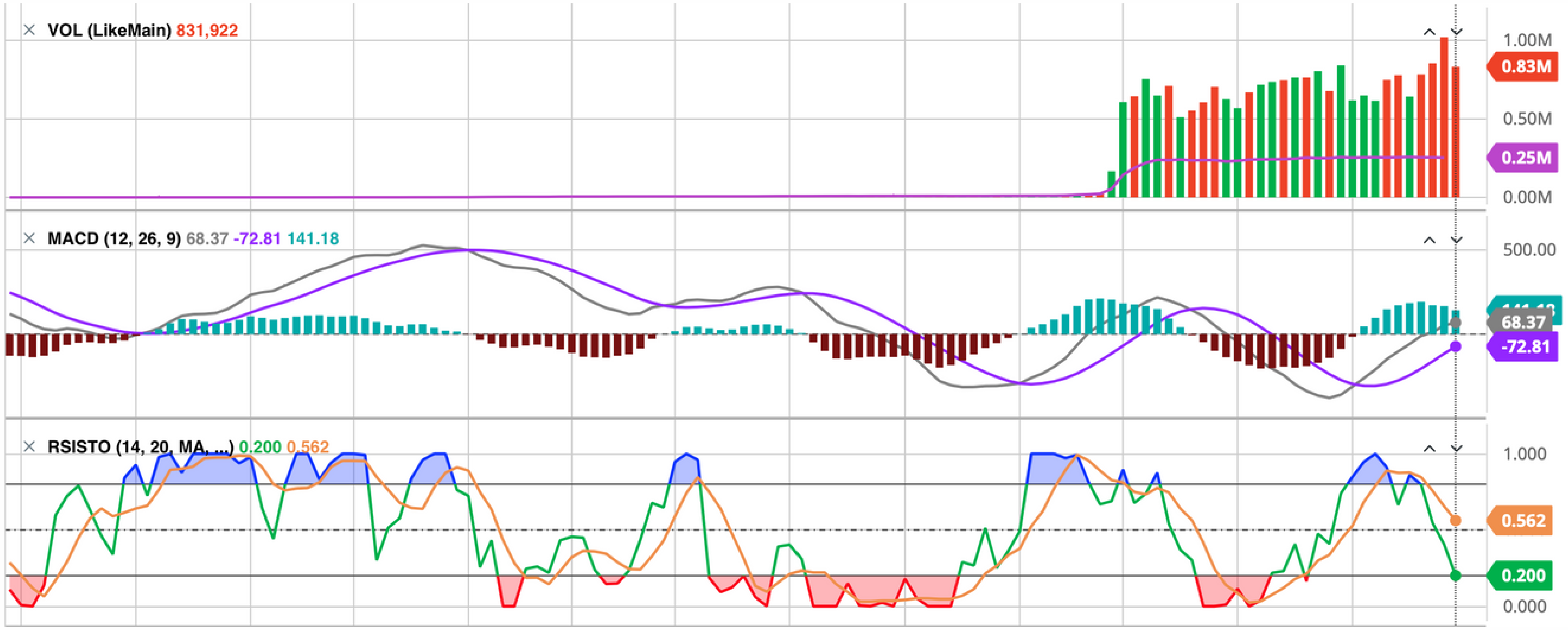
Median Band: At a value of 15,004.74, the median band or the middle band represents the average price over the defined period. Notably, the market price is currently below this band.

Lower Band: The lower band's position at 15,439.15 is significantly above the current market price of 14,664.00. This suggests that the market is operating much below its average range, hinting at a potentially oversold condition and a possible bullish rebound in the near term.

TREND SEEKER (TRSP):

Value: Standing at 15,486.18, the TRSP value is notably higher than the future price of 14,664.00. This indicates a potential downtrend, as the trend seeker suggests a higher price than what is expected in the near future.

REQUIRED TECHNICAL ANALYSIS



VOLUME:

There was a significant increase in trading, mainly dominated by **sells** (red bars).

RSISTO:

RISTO is approaching the **oversold level**, indicating a potential rebound or stabilisation in the price of futures. The recent move from overbought levels to more moderate levels suggests a loss of **bullish momentum**. The green line crossing the blue line downwards may presage a change in the downtrend for the price of futures.

MACD:

Value/Signal: MACD at 68.37, signal line at -72.81. MACD well above the signal indicates bullish momentum. **Histogram**: Transition from negative to positive bars signifies strengthening bullish momentum. **Crossovers**: Current MACD above signal suggests a robust bullish trend.

Combining these analyses, the market is showing signs of potential bearishness. The MACD indicates a bearish movement, although the gap is narrowing, suggesting a weakening of this trend. The Bollinger Bands show that prices are close to the lower band, suggesting possible oversold conditions. The RISTO is approaching the oversold level, indicating a potential rebound. Overall, the market appears to be in a consolidation phase, with a possible change in trend to watch out for.

SUPPLY AND DEMAND

We can notice thanks to this chart that the demand of NASDAQ futures have fluctuated for 6 months now. For the April month is was a light decrease then from may to mid July a great increase can be noticed. Then fluctuated from July to mid August to increase until September to decrease until today. And overall the demand increased from 1,3000 to 1,4756

The demand for NASDAQ stock contracts is influenced by various factors, including economic conditions, market news, market sentiment, market volatility, central bank policies, sectoral and specific business performance, and foreign capital flows. A robust economy can stimulate increased interest for NASDAQ investments, leading to a higher demand for NASDAQ stock contracts. Market news, financial results, political and economic developments, global events, and natural disasters can also influence investors and traders. Market volatility can attract active traders, offering more trading opportunities. Central bank policies, such as interest rates and economic bond programs, can also influence the demand for NASDAQ stock contracts. The demand for NASDAQ stock contracts is a complex combination of these factors, influenced by economic conditions, market trends, and investor appetite for risky assets.

NASDAQ futures supply is influenced by factors such as the decision of emetters, liquidity of the secondary market, regulation, market conditions, emetteurs' commercial strategy, and the evolution of the NASDAQ Composite index. The decision of emetters depends on market demand, economic conditions, and other factors. The liquidity of the secondary market is crucial for emetters to propose and sell products. Regulations govern the creation and emission of NASDAQ contracts, and changes in regulations can impact emetters' supply. The emetteurs' commercial strategy also influences their supply. The evolution of the NASDAQ Composite index can also influence emetters' supply.

SHORT OR LONG CHOICE

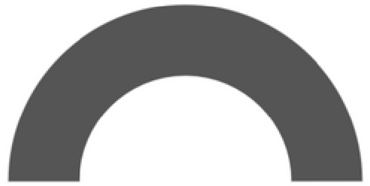
Overall Average:

96% SELL

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.

Current Strength

Current Direction



INDICATOR		Opinion	Strength & Direction
Composite Indicator	**Signal**	**Strength**	**Direction**
Trend Seeker®	SELL	Maximum	Weakening
Short Term Indicators			
7 Day Average Directional Indicator	SELL	Average	Strongest
10 - 8 Day Moving Average Hilo Channel	SELL	Maximum	Strengthening
20 Day Moving Average vs Price	SELL	Average	Strongest
20 - 50 Day MACD Oscillator	SELL	Soft	Weakest
20 Day Bollinger Bands	HOLD		Bearish
20 - Day Average Volume: 740,607			**Average: 80% SELL**
Medium Term Indicators			
40 Day Commodity Channel Index	SELL	Weak	Weakest
50 Day Moving Average vs Price	SELL	Soft	Strongest
20 - 100 Day MACD Oscillator	SELL	Soft	Strongest
50 Day Parabolic Time/Price	SELL	Maximum	Strongest
50 - Day Average Volume: 428,452			**Average: 100% SELL**
Long Term Indicators			
60 Day Commodity Channel Index	SELL	Soft	Weakest
100 Day Moving Average vs Price	SELL	Soft	Strongest
50 - 100 Day MACD Oscillator	SELL	Weak	Strongest
100 - Day Average Volume: 214,904			**Average: 100% SELL**

According to a detailed analysis of NASDAQ futures for December 2023, **several indicators** are converging towards a short (sell) strategy. On the one hand, market sentiment is clearly bearish, with strong sell recommendations.

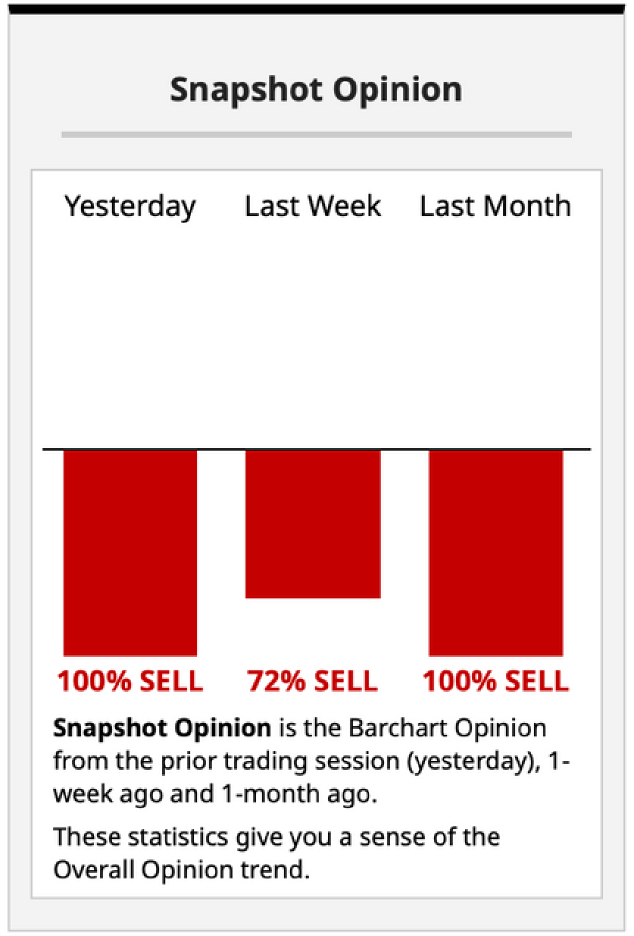
On the other hand, the significant **increase** in **trading volumes**, mainly dominated by sales, despite falling prices, **indicates strong selling activity** and confirms the downward pressure on the market. In addition, the **Trend Seeker (TRSP)** is showing a **value higher than the future price,** suggesting an imminent downward trend.

Falling stock market indices, **geopolitical tensions**, particularly in Israel, and **inflationary** concerns are prompting investors to favor **short-term trading strategies** over long-term investments. This indicates a bearish signal for long-term investments, i.e. in technology.

Against this backdrop, we recommend adopting **a short strategy on NASDAQ futures** versus the USD. However, it is essential to keep a close eye on the market for any rapid or unexpected developments that could influence the trading decision.

FUTURE 4

ULTRA T-BOND



Ultra T-Bond Dec '23 (UDZ23)

111-04s +0-09 (+0.25%) 10/20/23 [CBOT]

QUOTE OVERVIEW for Fri, Oct 20th, 2023

Try Excel Alerts Watch Help

Day Low	Day High
109-29	111-25

Open 110-21

Previous Close	110-27
Volume	330,233
Open Interest	1,547,910
Stochastic %K	8.88%
Weighted Alpha	-26.70
5-Day Change	-6-02 (-5.17%)
52-Week Range	109-29 - 145-01

The Ultra T-Bond futures contract is a financial instrument that allows speculation on long-term interest rates based on U.S. Treasury bonds, with specifications varying by **exchanges**, influenced by **monetary policies**, **inflation**, and **growth**, where investors can be buyers or sellers, but trading carries **high risk** and requires a **deep understanding**

In studying the futures market, we decided to focus on the ultra t-bond for December 2023. As the image shows, this contract shows some **notable variations that deserve our attention.** Recently, the ultra t-bond increased slightly by **0,25%** compared with the previous close. Indicators such as volume and open interest also give us an insight into recent activity in this contract.

The 'Snapshot Opinion' section catches our eye in particular: it shows a pronounced bearish sentiment with high sell recommendations. This could suggest that market participants believe the yen could continue to weaken in the short term.

FUTURE SPECIFICATIONS

Ultra T-Bond Dec '23 (UDZ23)

111-04s **+0-09 (+0.25%)** 10/20/23 [CBOT]

CONTRACT SPECIFICATIONS for Fri, Oct 20th, 2023 Alerts Watch Help

Barchart Symbol	UD
Exchange Symbol	UB
Contract	Ultra 30-Year Treasury-Bond
Exchange	CBOT
Tick Size	32nds of a point ($31.25 per contract) rounded up to the nearest cent per contract; par is on the basis of 100 points
Margin/Maintenance	$6,600/6,000
Daily Limit	None
Contract Size	$100,000
Months	Mar, Jun, Sep, Dec (H, M, U, Z)
Trading Hours	5:00p.m. - 4:00p.m. (Sun-Fri) (Settles 2:00p.m.) CST
Value of One Futures Unit	$1,000
Value of One Options Unit	$1,000
Last Trading Day	Seventh business day preceding the last business day of the delivery month

EXCHANGE:

Ultra T-Bond futures are traded on the **Chicago Mercantile Exchange (CME)**, one of the world's largest derivatives exchanges known for providing high levels of liquidity and transparency to traders.

EXPLANATION OF THE SYMBOL J6Z23:

The symbol for Ultra T-Bond futures, for example, "UBZ23," is broken down as follows: "**UB**" represents Ultra T-Bonds, "**Z**" indicates the delivery month, which is December, and "**23**" stands for the year 2023. This unique symbol identifies the specific Ultra T-Bond futures contract for December 2023.

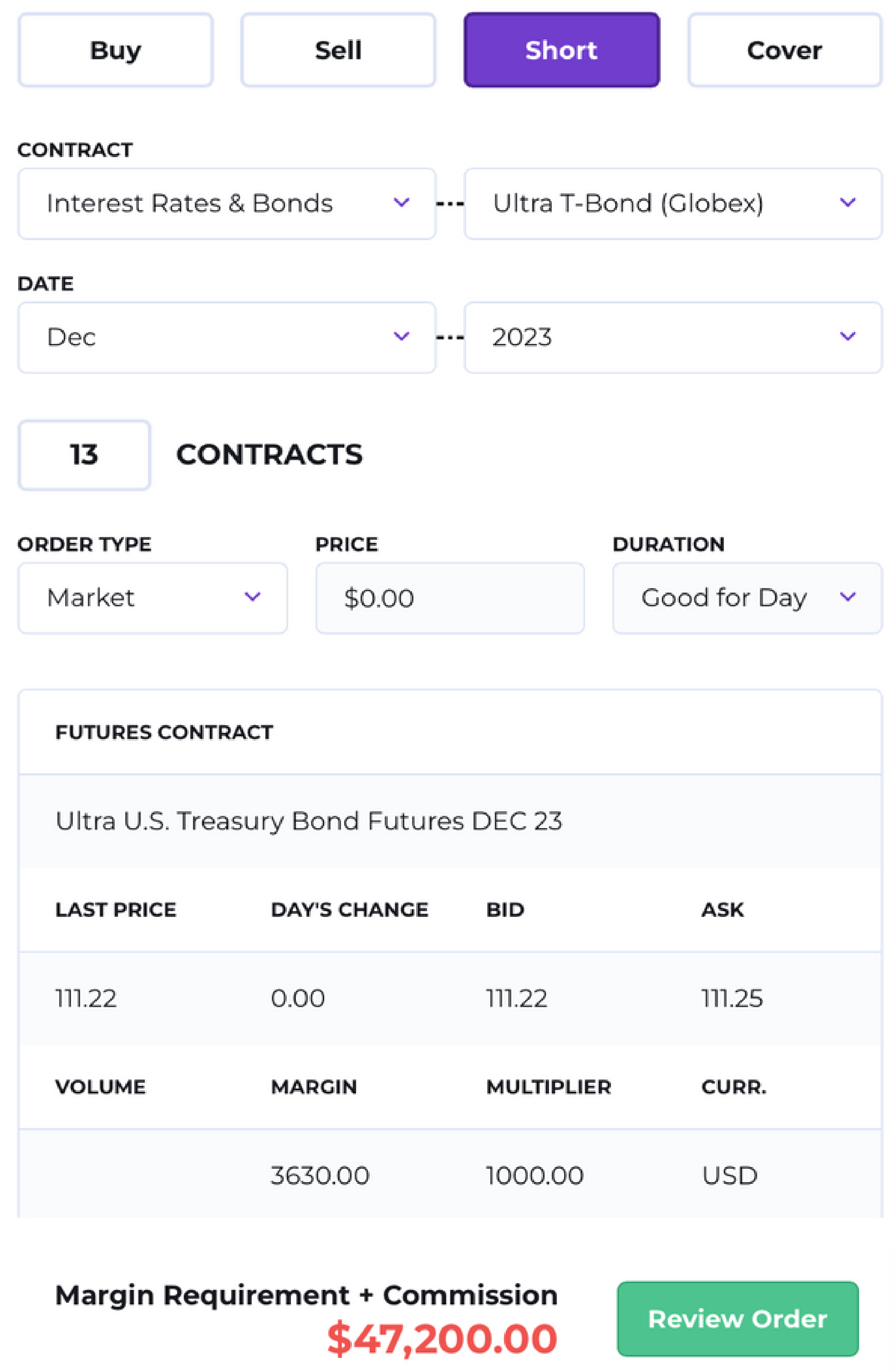
LAST TRADING DAY:

The contract for Ultra T-Bond futures expires on the **Friday the 23rd of December, 2023.**

TRADING TIMES:

Trading for Ultra T-Bond futures occurs **from 5:00 p.m. to 4:00 p.m. (Sunday to Friday)** US time, which translates to **12:00 a.m. (midnight) to 11:00 p.m. (Monday to Saturday)** French time. This extended trading window allows French traders to participate throughout most of the day and into the late evening.

FUTURE SPECIFICATIONS



utlra t-bond		
contract	$	100 000
stocktrack margin	$	3 630
number of contracts		13
investment	$	50 000
Market Price	$	111
investment $	$	1 300 000
Stocktract Investment	$	47 200
leverage		32.8

CONTRACT SIZE:

Each Ultra T-Bond contract has a size of $100,000. This means that each contract represents an exposure of $100,000 to long-term interest rate movements.

NUMBER OF CONTRACTS:

We have chosen to invest in 13 Ultra T-Bond contracts. This equates to an exposure of $1,300,000 (13 contracts x $100,000 per contract) to long-term interest rate movements.

INVESTMENT AMOUNT:

The margin required for this position is $47,190. This is the amount we must set aside as collateral to cover our investment. It represents the necessary sum to secure our position.

LEVERAGE CALCULATIONS:

he leverage of our position is approximately 32.8 (1,300,000 / $47,190), indicating that our exposure to long-term interest rate movements is 32.8 times higher than the margin required. Leverage is an important factor to monitor, as it can amplify both gains and losses.

FUNDAMENTAL RESEARCH

ARTICLE 1

The recent article gives a mixed picture of the current situation on the markets. US indices, notably the S&P 500, the Dow Jones and the Nasdaq, are back to their lowest levels for a week and a half. This development is largely explained by the fact that the yield on the 10-year note has reached its highest level for 16 years, indicating rising borrowing costs and potential downward pressure on bond prices. The fall in weekly jobless claims in the US to their lowest level in 8-3/4 months is an important point, pointing to a robust labour market. If this trend persists, the Fed may be inclined to maintain or raise interest rates, which could push bond prices even lower.

In addition, rising geopolitical tensions, particularly in the Middle East, introduce an element of uncertainty. However, given the rise in bond yields and a possible hawkish stance by the Fed, the environment seems to favour shorting T-Bonds in the future.

ARTICLE 2

The global environment is undergoing a period of economic and geopolitical tension, which is clearly reflected in the financial data and markets. The article's findings are clear: turbulent economic data point to major anomalies, with the 8% mortgage rate in particular becoming unsustainable for many consumers. In addition, the bond market is under considerable pressure, with bonds falling to levels not seen for 16 years.

One of the most worrying indicators is the rapid change in the spread between 10-year and 2-year Treasuries, which has gone from -100 basis points to -16 in a very short space of time. Historically, such reversals have often preceded major falls on the stock markets. At the same time, the crisis in the Middle East is boosting crude oil prices. However, despite this rise, an increase in prices to between $100 and $150 could push the global economy into recession or even depression.

Given this economic context and developments in the bond market, it seems justified to consider taking a bearish position on T-Bond futures. The article's recommendations, such as reducing equity positions, reinforce this bearish outlook for bonds.

FUNDAMENTAL RESEARCH

CONCLUSION

The two articles analysed highlight the **unstable economic and geopolitical situation**, which is having a major impact on the financial markets. Several points in common emerge from the two analyses:

- 10-year Treasury bond yields have reached historic highs, reflecting **rising borrowing costs** and **potential downward** pressure on bond prices.
- The US labor market **looks robust**, suggesting that the Federal Reserve could **adopt a more restrictive stance on interest rates**, putting further pressure on bond prices.
- **Geopolitical tension,** particularly in the Middle East, adds an element of uncertainty that could potentially **influence market direction**.

Given these factors and current economic data, both the labor market and interest rate trends point to a probable fall in T-Bond prices. Furthermore, the recommendations in the two articles converge in favoring a bearish stance on T-Bond futures. Combining these analyses, our fundamental perspective suggests that, from the point of view of analysts and current indicators, it would be preferable to short T-Bonds in the current environment.

REQUIRED TECHNICAL ANALYSIS

MOVING AVERAGES (MA):

MA5: Below the MA50, indicating short-term bearish momentum.

MA50: Above the MA5, suggesting a possible resistance level.

MA200: Not indicated, so no long-term trend information available.

BOLLINGER BANDS (BBANDS):

Upper band: 120.25

Median Band: 115.28

Lower Band: 110.31

The current price is situated between the median band and the lower band, signaling potential downward pressure, but also indicating a possibility of approaching oversold conditions.

TREND SEEKER (TRSP):

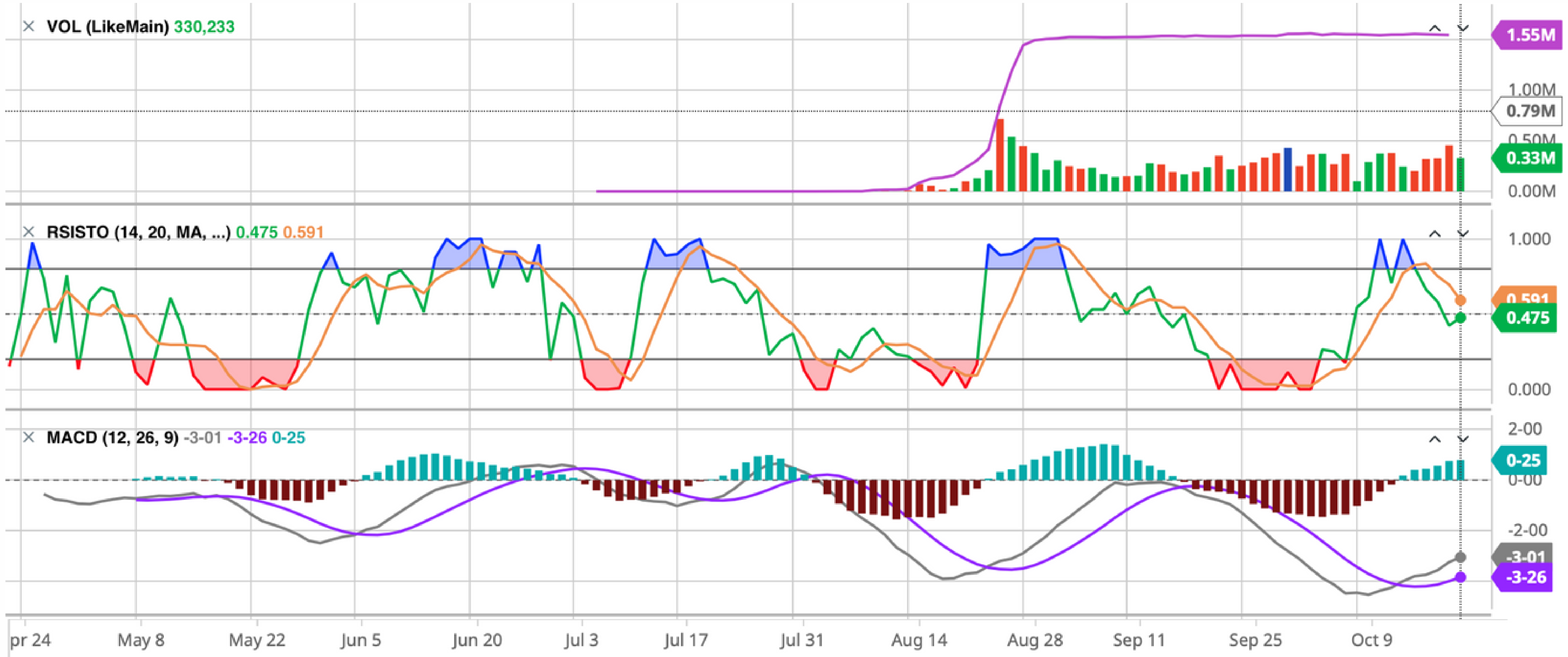
Value: 119.26 The TRSP is above the current MA5 price, which may suggest a downtrend. However, considering the proximity between them, a trend reversal could be on the horizon in the short term.

REQUIRED TECHNICAL ANALYSIS

VOLUME:
The trading volume displays a sharp rise, predominantly characterized by sales as seen from the prominent red bars towards the right of the graph.

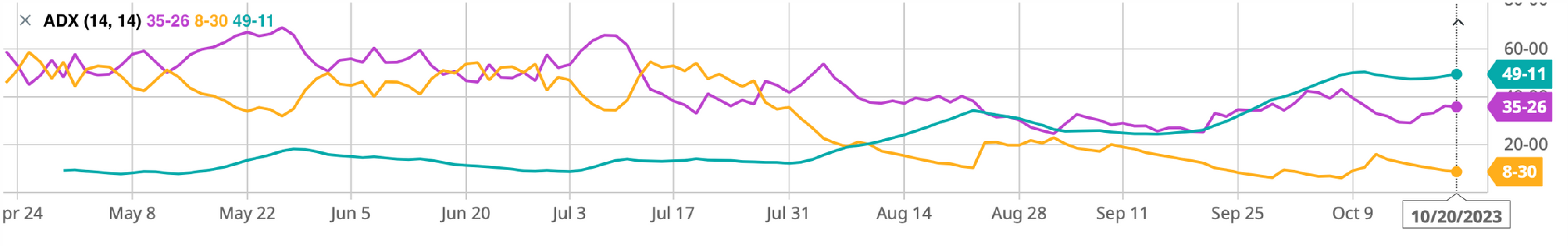
RSISTO:
The RSISTO lies in a neutral territory with values fluctuating between **0.475 and 0.591**. This means that the market is neither in an overbought nor in an oversold state. There have been several peaks and troughs over the observed duration, suggesting consistent oscillations.

MACD:
The MACD portrays a bearish trend, with the MACD line residing beneath the signal line for the majority of the displayed period. Nevertheless, as we approach the most recent data, there seems to be a convergence between the two lines, hinting at a potential reduction in the bearish momentum.



Combining these observations, the market demonstrates **signs of fluctuation**, with trading volume surging, particularly on the selling side. While the MACD signals a bearish trend, the convergence of its lines indicates a potential decline in this bearish drive. The RSISTO is situated within a neutral range, indicating neither overbought nor oversold conditions. In summation, the market may be transitioning through a stabilization phase, and a forthcoming trend shift should be monitored closely.

OTHER TECHNICAL ANALYSIS TOOL

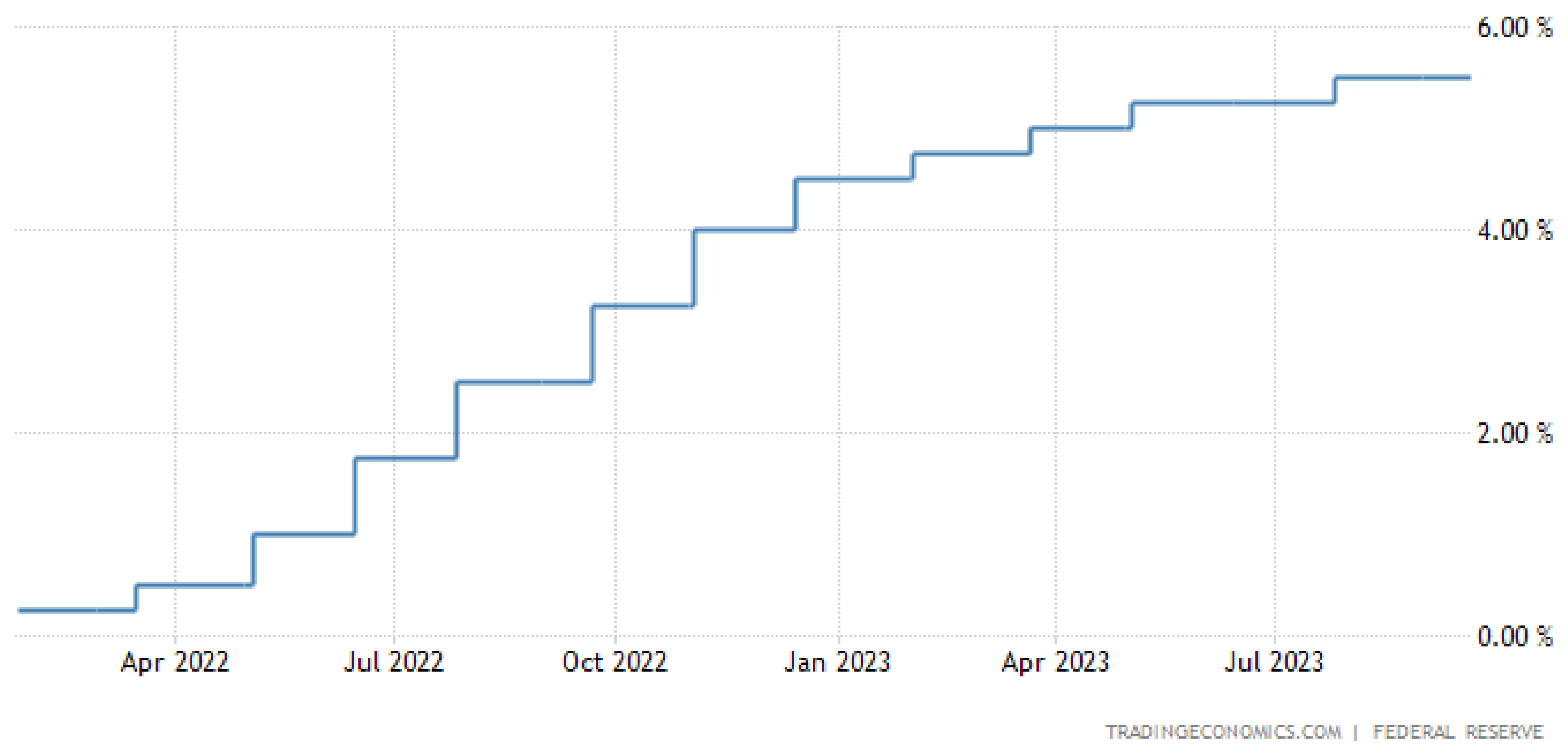


The Average Directional Index (ADX) is a crucial tool for determining the **strength of a trend.** With a notable value of **49.11**, the ADX signals an extremely **strong trend**, well above the conventional threshold of 20.

In terms of directional indicators, **the DI+ stands at 35.3, while the DI- is at 8.3.** The clear superiority of the DI+ over the DI- suggests a predominantly bullish trend, highlighting that buying forces have a dominant presence in **the market relative to sales forces.**

In conclusion, the ADX reveals **a powerful and marked trend,** and the DI+ and DI- lines reinforce this uptrend. This could be interpreted by investors and traders as a sign that **the market is currently dominated by buyers.**

SUPPLY AND DEMAND



CHARTS OF UNITED STATES FED FUNDS RATE
TRADINGECONOMICS.COM

DEMAND

The demand for Ultra T-Bond futures contracts is influenced by interest rates, inflation, expectations regarding the Federal Reserve's monetary policy, economic stability, and geopolitical events.

SUPPLY

The supply of Ultra T-Bond futures contracts depends on the quantity of issued U.S. Treasury bonds and potential new issuances.

NEWS

The financial markets are experiencing volatility, with U.S. indices declining due to rising bond yields, which exert downward pressure on bond prices. However, weekly jobless claims in the United States have reached their lowest level in eight and three-quarters months, indicating a strong job market, which could prompt the Fed to raise interest rates. Geopolitical tensions, particularly in the Middle East, add uncertainty, and shorting Treasury bonds is being considered.

The global economy is also under pressure, with unsustainable mortgage rates, record-high bond yields in 16 years, and a rapid inversion of yields, often associated with stock market declines. Middle East tensions are driving up oil prices, but a significant increase could lead to a global recession. In this context, a bearish position on Treasury futures is recommended.

SHORT OR LONG CHOICE

Ultra T-Bond Dec '23 (UDZ23)
111-04s +0-09 (+0.25%) 10/20/23 [CBOT]
BARCHART OPINION for Fri, Oct 20th, 2023

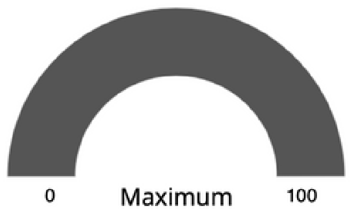
Tutorial Alerts Watch Help

Overall Average:

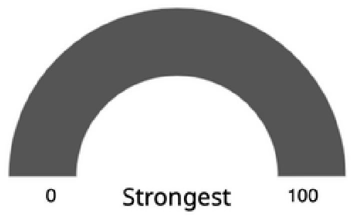
100% SELL

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.

Current Strength



Current Direction



Barchart Opinion	
INDICATOR	Opinion / Strength & Direction
Composite Indicator	
Trend Seeker®	SELL
Short Term Indicators	
7 Day Average Directional Indicator	SELL
10 - 8 Day Moving Average Hilo Channel	SELL
20 Day Moving Average vs Price	SELL
20 - 50 Day MACD Oscillator	SELL
20 Day Bollinger Bands	SELL
20 - Day Average Volume: 317,204	Average: 100% SELL
Medium Term Indicators	
40 Day Commodity Channel Index	SELL
50 Day Moving Average vs Price	SELL
20 - 100 Day MACD Oscillator	SELL
50 Day Parabolic Time/Price	SELL
50 - Day Average Volume: 256,521	Average: 100% SELL
Long Term Indicators	
60 Day Commodity Channel Index	SELL
100 Day Moving Average vs Price	SELL
50 - 100 Day MACD Oscillator	SELL

According to our in-depth analysis of Ultra T-Bond futures for December 2023, several indicators are converging towards a **bearish trend.** Market sentiment is clearly bearish, with strong sell recommendations. The Bollinger Bands indicate potential oversold conditions, suggesting a possible **short-term rebound** rather than a continuing downtrend.

The Trend Seeker Indicator (TRSP) also shows a downward trend, albeit weak, and **trading volume has increased**, mainly in sales, **confirming the downward pressure**. In addition, the ADX indicates an extremely strong trend, with **buyers clearly dominating the market.**

Analyses converge on a bearish outlook for US Treasuries. Yields on 10-year bonds are at **historic highs,** indicating rising borrowing costs and downward pressure on bond prices. With a robust US labor market, **the Fed could adopt a restrictive monetary policy**, putting further pressure on bonds. Geopolitical tensions add to the uncertainty.

Against this backdrop, we recommend a **short (sell) position on Ultra T-Bonds** versus the USD. However, given the strength of the downtrend, it is essential to implement appropriate risk management strategies and monitor the market closely for any rapid developments.

GLOBAL ADDITIONAL COMMENTS

CURRENT ECONOMIC CONTEXT:

The United States is currently going through a period of economic uncertainty. With interest rates fluctuating between 5.25% and 5.5%, and inflation at 3.2%, monetary policy follows a dual mandate from the Fed to ensure price stability and maximum employment. The slowdown in growth seen in the first half of 2022, coupled with inflation peaking at 8.3% in August, reveals a tense situation. Although the labour market appears to have recovered its pre-crisis unemployment rate, a labour shortage persists, probably exacerbated by the mid-term elections in November 2022.

INVESTMENT STRATEGY:

Faced with these uncertainties, our team has adopted a strategy defined by our analyses and forecasts. We have chosen to short the Nasdaq Mini and Ultra T-Bond futures. These decisions are based on the current economic fragility and uncertainties weighing on these markets. In addition, given the current volatility and gold's historical propensity to act as a safe haven, we have opted for a long position on the BTC Index and gold.

JUSTIFICATION OF OUR CHOICES:

Despite the traditional limit of two short positions, our analysis revealed convincing futures for a long position, in this case BTC Index and gold. The Fed is forecasting inflation of 5.4% at the end of 2022 and 2.8% at the end of 2023. With growth revised downwards and rising geopolitical tensions, as well as the lingering shadow of the pandemic, the market looks weakened.

CHOOSING THE US DOLLAR AS OUR OPERATING CURRENCY:

Using the US dollar (USD) as the main currency for our future transactions is not an unwise choice. Despite recent shocks and the weakening of the US economy, the dollar retains its status as the world's benchmark currency. In the world of international business and finance, it remains the main reserve and transaction currency. Its predominance on financial markets offers unrivalled liquidity and stability, reducing the risks associated with currency fluctuations.

CONCLUSION

To conclude, our strategic choices on futures aim to take advantage of a changing US economy and an uncertain international environment. By anticipating market movements and drawing on in-depth analysis, we aim to position our investments to maximise returns while minimising risk. The coming months will be decisive and will require constant monitoring to adjust our positions if necessary.

GLOBAL ASSET MANAGEMENT

GROUP F

Doriane Duteil, Océane Rozniatowski,
Titouan Clément, Basile Arthaud,
Hugo Moissonnier, Charles Milliand,
Charles Blethon.

CONTENT

OPTION 1
CALL NOVO NORDISK

Charles Blethon

OPTION SYMBOL

Option Details For NVO2315L100

CORRECT SYMBOL NVO121523C00100000

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is NVO.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd).
- In our case, the expiration date shoud be represented as followed: **121523**

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a call so it should be represented as C

STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $100 so it should be represented as 00100000

FUNDAMENTAL ANALYSIS

INDUSTRY

INDUSTRY:

The pharmaceutical industry is one of the world's largest and most dynamic industries. It encompasses the research, development, production, distribution and marketing of medicines for human and animal consumption. The growth of this industry is fuelled by the increasing demand for medicines due to demographic growth, an ageing population and the emergence of new diseases.

INDUSTRY LEADER:

Pfizer, ABBVIE, Roche, Johnson & Johnson, Merck & Co. and Novo Nordisk.

INDUSTRY KEY NUMBERS:

Total sales: $1,291B
Growth: 6.8%
Market share: North America (47.2%), Europe (24.5%) China (9.7%)

COMPANY

COMPANY:

Novo Nordisk is a Danish multinational pharmaceutical company founded in 1923. It is a world leader in the fields of diabetes, hemophilia, growth and obesity. The company is particularly renowned for its innovative diabetes treatments, which account for a significant proportion of its revenues.

COMPANY KEY NUMBERS:

Total revenue: $54.30B
Workforce: 53 000
Market share: 3.2%
Beta: 0.76
PER: 45,68

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 8.02
Return on Equity TTM: 31.74%
Gross Margin TTM: 69.03%
Total Debt to Equity MRQ: 116.23%
Price to Book MRQ: 7.29

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 45.52
Return on Equity TTM: 81.54%
Gross Margin TTM: 84.35%
Total Debt to Equity MRQ: 28.41%
Price to Book MRQ: 33.83

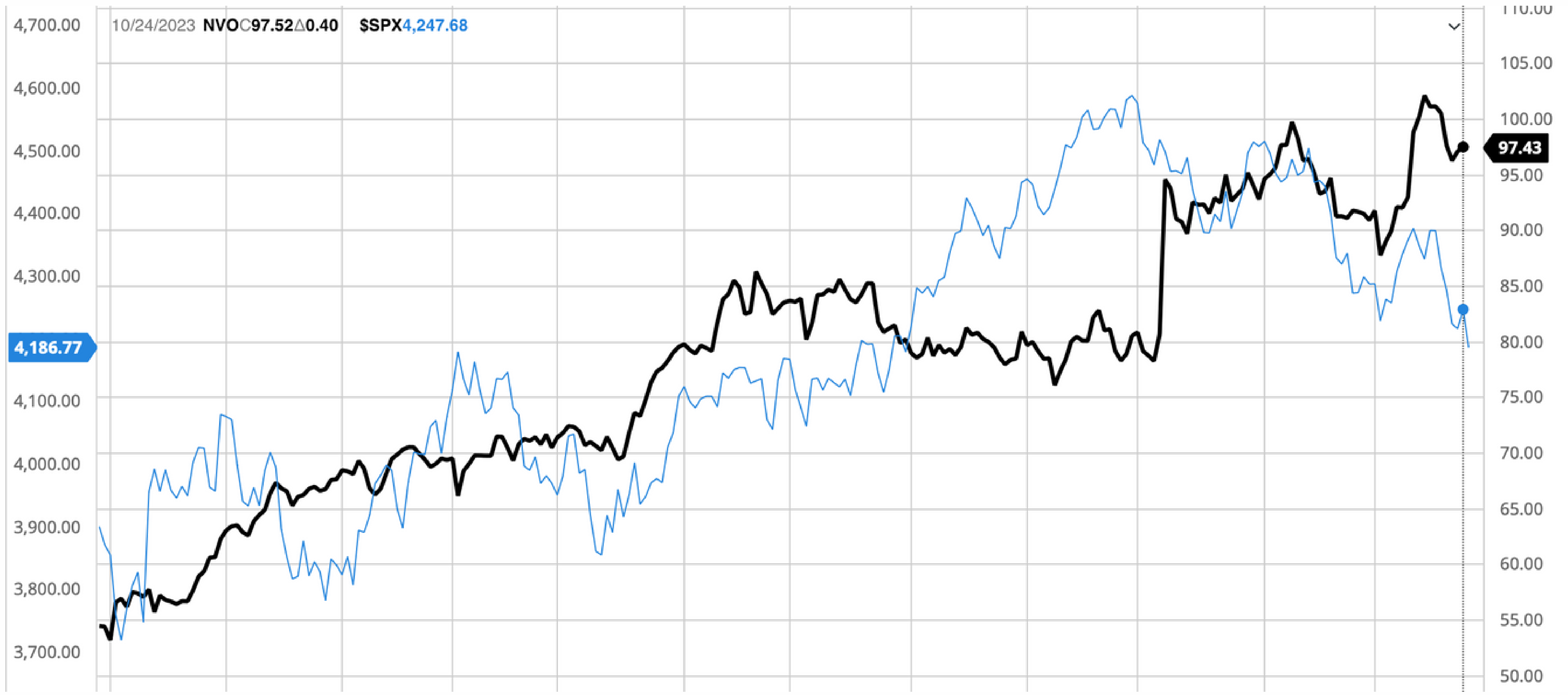
Novo Nordisk's **P/E ratio** is considerably **higher than the industry average**. This could indicate that investors are willing to pay a higher price for Novo Nordisk's future earnings, or it could also mean that the stock is overvalued relative to its industry peers. Novo Nordisk's **Price-to-sales** ratio is also **higher than that of the industry**. This could suggest that Novo Nordisk has **strong revenue growth** or **that investors have high expectations for the company**. Novo Nordisk's ratio is slightly higher than that of the industry, which could indicate a **slightly higher valuation or strong cash flow.** Novo Nordisk's Price to Book ratio is significantly higher than the industry average. This suggests that Novo Nordisk's underlying assets are valued more expensively than those of its peers. Novo Nordisk's **return on equity** is **exceptionally high** compared with the industry. This indicates superior **efficiency in generating profits from its equity.**

Based on these ratios, Novo Nordisk appears to **outperform the industry average** in terms of return on **equity and valuation. Howeve**r, this superior performance also comes with higher valuation ratios, which could indicate **high expectations on the part of investors.**

PRICE HISTORY

ONE YEAR PERFORMANCE:

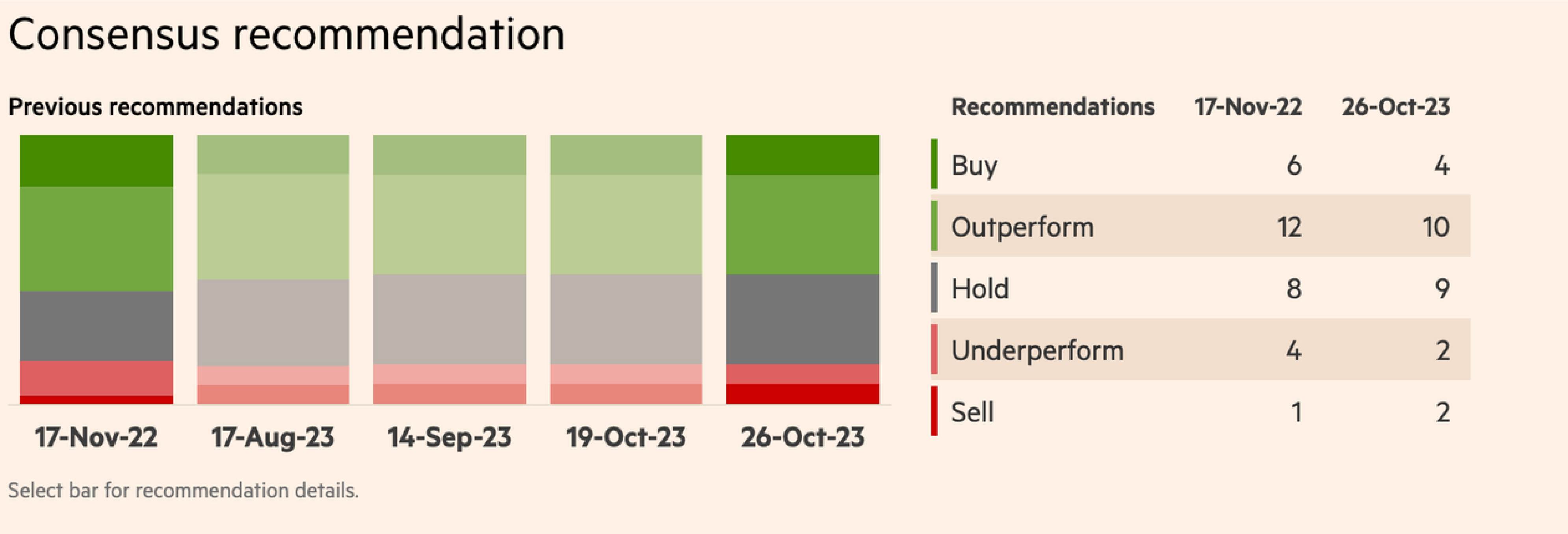
SP500 (blue line): 9.30%
Novo Nordisk (black line): 72%



Over the past year, the performance of Novo Nordisk shares has far outperformed the S&P 500 index. As illustrated in the chart, Novo Nordisk has registered an impressive **increase of 72%,** while the S&P 500 index has **risen by just 9.30%.** This clear outperformance by Novo Nordisk could be attributed to several factors, such as strong **financial results, positive announcements concerning the company** or advances in its **product portfolio**.

Novo Nordisk's notable outperformance of the S&P 500 this year could, in part, be explained by its **0.76 beta**. This lower volatility relative to the market may have worked in Novo Nordisk's favor during unfavorable market swings, helping the company to preserve its value and even grow, whereas other might have suffered losses.

CONSENSUS RECOMMENDATION



Recommendations	17-Nov-22	26-Oct-23
Buy	6	4
Outperform	12	10
Hold	8	9
Underperform	4	2
Sell	1	2

To understand how the recommendation rate is calculated, we will use the weighted average method. We'll give each category a value that will increase its weight in the final calculation.

Buy: 1, Outperform: 2, Hold: 3 Underperform: 4 Sell: 5

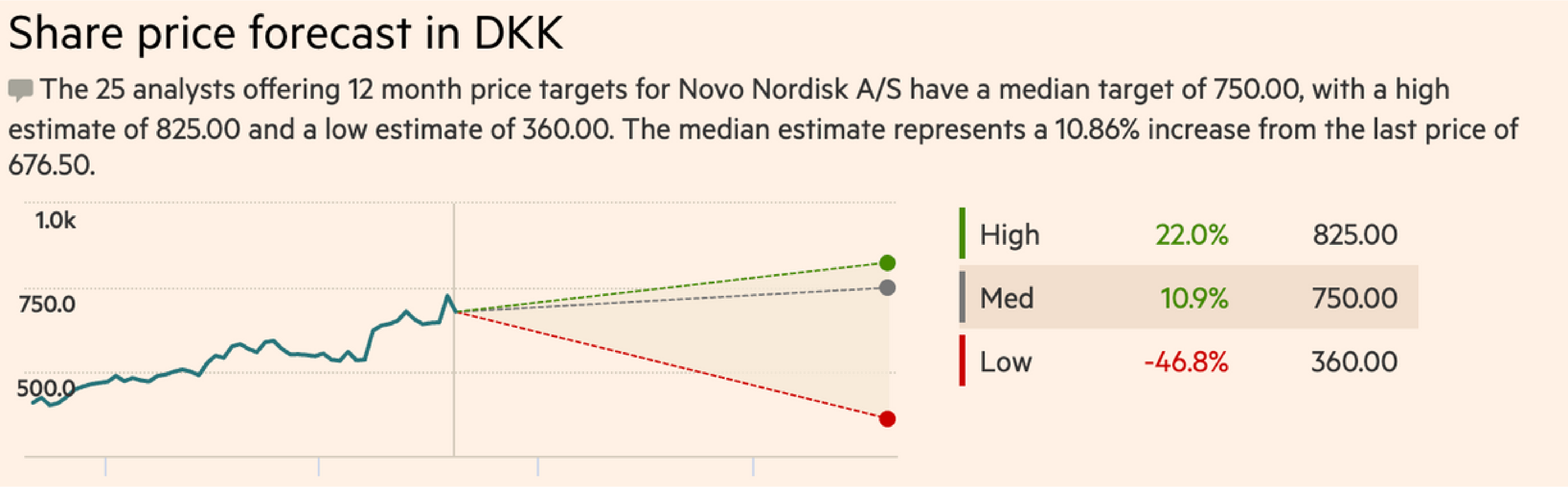
We will then count the number of analyst opinions by multiplying them by their weight.
Buy signal = 4, Outperform = 20 Hold = 27,
Underperform = 8, Sell = 10

We then add up all the products = 69/total recommendations
69 ÷ 27 = 2.55

Analyst recommendations for Novo Nordisk shows a change in the average weighting between November 2022 and October 2023. In November 2022, the **weighted average was 2.22,** suggesting a general trend towards **moderate buy recommendation**s. However, by October 2023, this figure **had risen to 2.55**. This increase indicates **a slight shift towards** a more neutral o**r hold position** on the part of analysts.

This move to a higher rating suggests that, although Novo Nordisk is still **viewed positively**, confidence in its near-term growth potential may have waned, or that analysts anticipate **a period of consolidation** for the company. It is essential for investors to take account of this shift in market perception in order to adjust their investment strategy.

TARGET PRICE



TARGET PRICE CONVERSION
Current: $95,75
High: $116,77
Med: $106,16
Low: $50,96

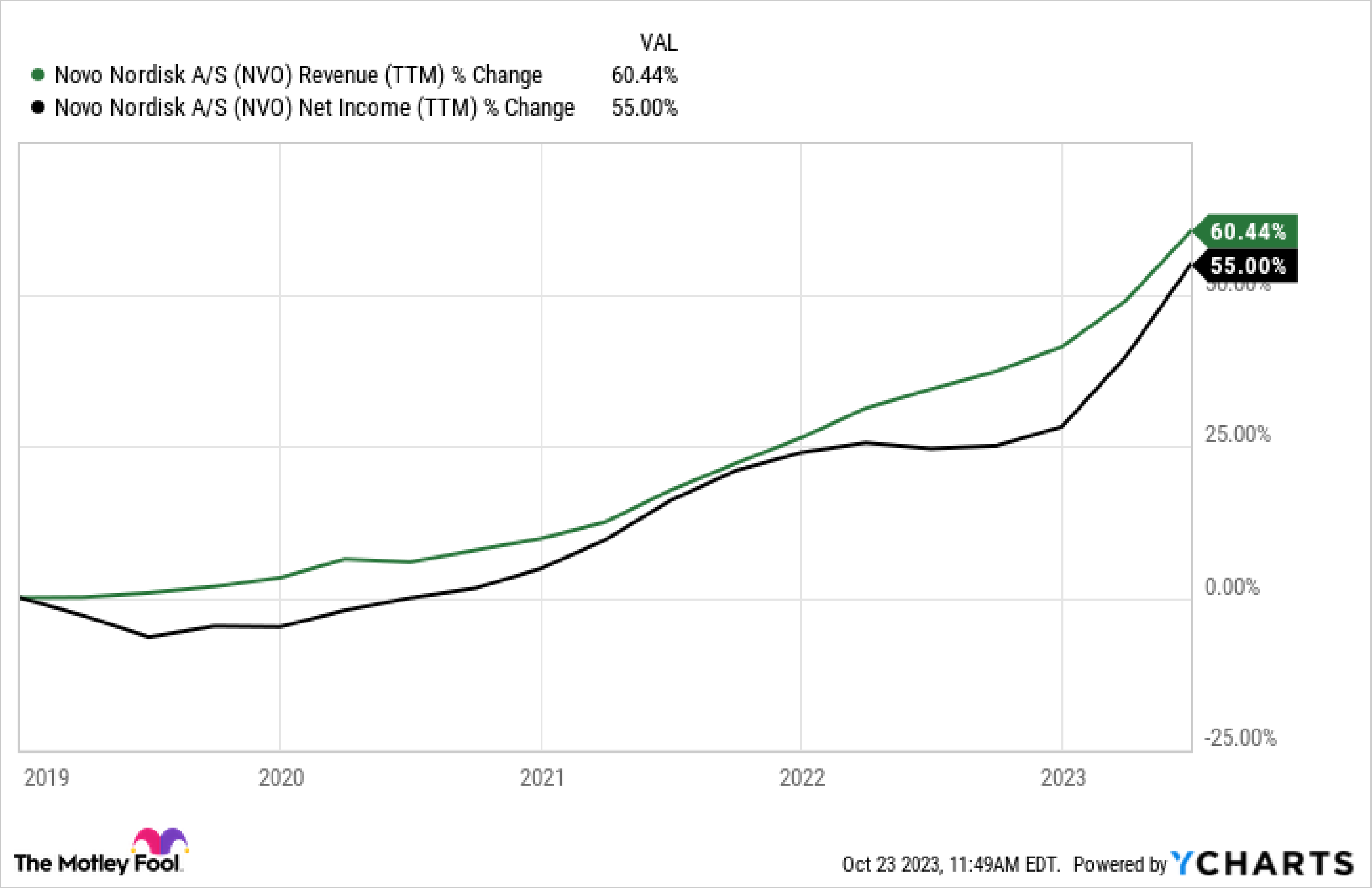
ANALYST ESTIMATES
The 25 analysts have provided a variety of estimates for Novo Nordisk's share price over the coming year. These forecasts vary considerably, perhaps reflecting uncertainty or a difference of opinion about the company's future performance.

MEDIAN ESTIMATE
The median estimate is **DKK 750.00**. This represents a potential increase of **10.86%** on the last recorded price of **DKK 676.50**. This median suggests that the majority of analysts are moderately optimistic about the stock's growth over the coming year.

HIGH AND LOW ESTIMATES
The highest estimate stands at **DKK 825.00**, which would indicate a potential increase of **22.0%** on the current price. This shows that some analysts are particularly optimistic about the company's potential. On the other hand, the lowest estimate is **DKK 360.00,** a significant **46.8%** fall on the current price. This reflects a much more cautious or pessimistic view on the part of a minority of analysts.

SUMMARY
Looking at these forecasts, it is clear that, while there is moderate optimism among the majority of analysts, there is also considerable uncertainty about Novo Nordisk's future.

HOT NEWS



ARTICLE

The article reports that Novo Nordisk has enjoyed remarkable success with its flagship products, Ozempic for diabetes and Wegovy for weight loss. These drugs have driven revenue growth and are at the heart of the company's announcements.

The company recently increased its guidance for 2023 on the back of strong sales growth, driven mainly by Ozempic and Wegovy. Sales are expected to increase by 32% to 38%, compared with the previous range of 27% to 33%. In addition, operating profit is expected to grow by between 40% and 46%, exceeding the previous guidance of 31% to 37%.

Demand for these drugs is booming, with strong growth potential. A recent survey of 500 companies in the US found that around 40% plan to offer coverage for GLP-1 drugs next year, compared with just 25% today.

The global market for GLP-1 drugs is growing, with a projection that it could reach $71 billion by 2032, according to analysts at JPMorgan Chase. Novo Nordisk has thus become Europe's most valuable company, surpassing even LVMH, and is well-positioned to benefit from this trend.

CONCLUSION :

According to the article, Novo Nordisk's shares have risen by **44%** this year, demonstrating its **long-term potential**. Despite a high price/earnings ratio of **46**, expected revenue and earnings growth suggest potential for continued appreciation, making it **a solid choice for long-term investors.**

STRATEGY

WHY HAVE YOU CHOSEN THIS OPTION STRATEGY?

Our decision to invest $10,000 in a Novo Nordisk call was based on a thorough analysis of financial data and current market trends. We based our decision on several key factors.

- **SECTOR:** Novo Nordisk operates in the pharmaceutical industry, which is experiencing strong demand due to demographic growth, an aging population and new emerging diseases. These positive factors support the company.

- **Financial performance:** with P/E and P/S ratios above the industry average, the company reflects investor confidence in its future earnings, indicating high expectations. In addition, a significantly above-average P/E ratio suggests that Novo Nordisk's assets are valued more favorably than those of its competitor

- **Indicator:** Current technical indicators are strongly bullish for Novo Nordisk, in the short, medium and long term. Most are advising "BUY", with many showing high to maximum strength. Despite some irregular signs of weakness, the overall trend remains very positive.

In short, our strategy is based on in-depth analysis and solid fundamentals, reinforcing our belief that this investment in Novo Nordisk is a promising one. We look forward to the results for 2023, which are already expected to be positive, to confirm our confidence in this investment strategy.

MOVING AVERAGE AND BOLLINGER BANDS

MOVING AVERAGES (MA):

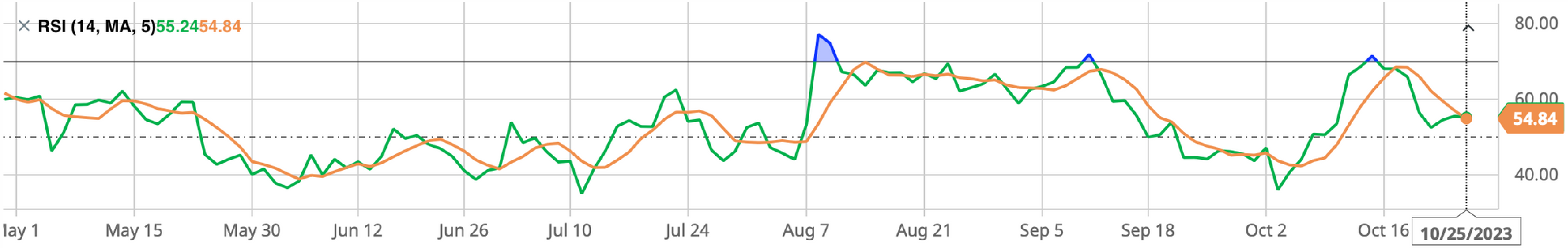
- **MA10**: At **99.12**, it is above the current share price of 97.43, suggesting short-term bearish momentum.
- **MA50**: With a value of **95.65**, it is below the MA10 but above the current share value, indicating a potential short-to-medium-term support level.
- **MA100**: Positioned at **87.87**, this moving average is well below current levels, suggesting a strong longer-term uptrend. It could serve as a solid support level in the event of a prolonged downturn in the share price.

BOLLINGER BANDS (BBANDS):

- **Upper band**: At **104.29**, it represents a potential overbought level where the price could meet resistance.
- **Median Band**: At **95.42**, this is close to the MA50 and could act as a short-term indicator of price direction.
- **Lower band**: At **86.54**, if the price approaches this value, it could indicate that the stock is in oversold condition and could soon rebound.

The share's current value, at **97.43**, lies between **the MA10 and MA50**, showing a balance of forces between buyers and sellers. However, the fact that it is closer to the median of the Bollinger Bands suggests the **potential for a short-term upward movement**. Caution is called for, however, as the price is also close to the MA10, indicating possible bearish pressure.

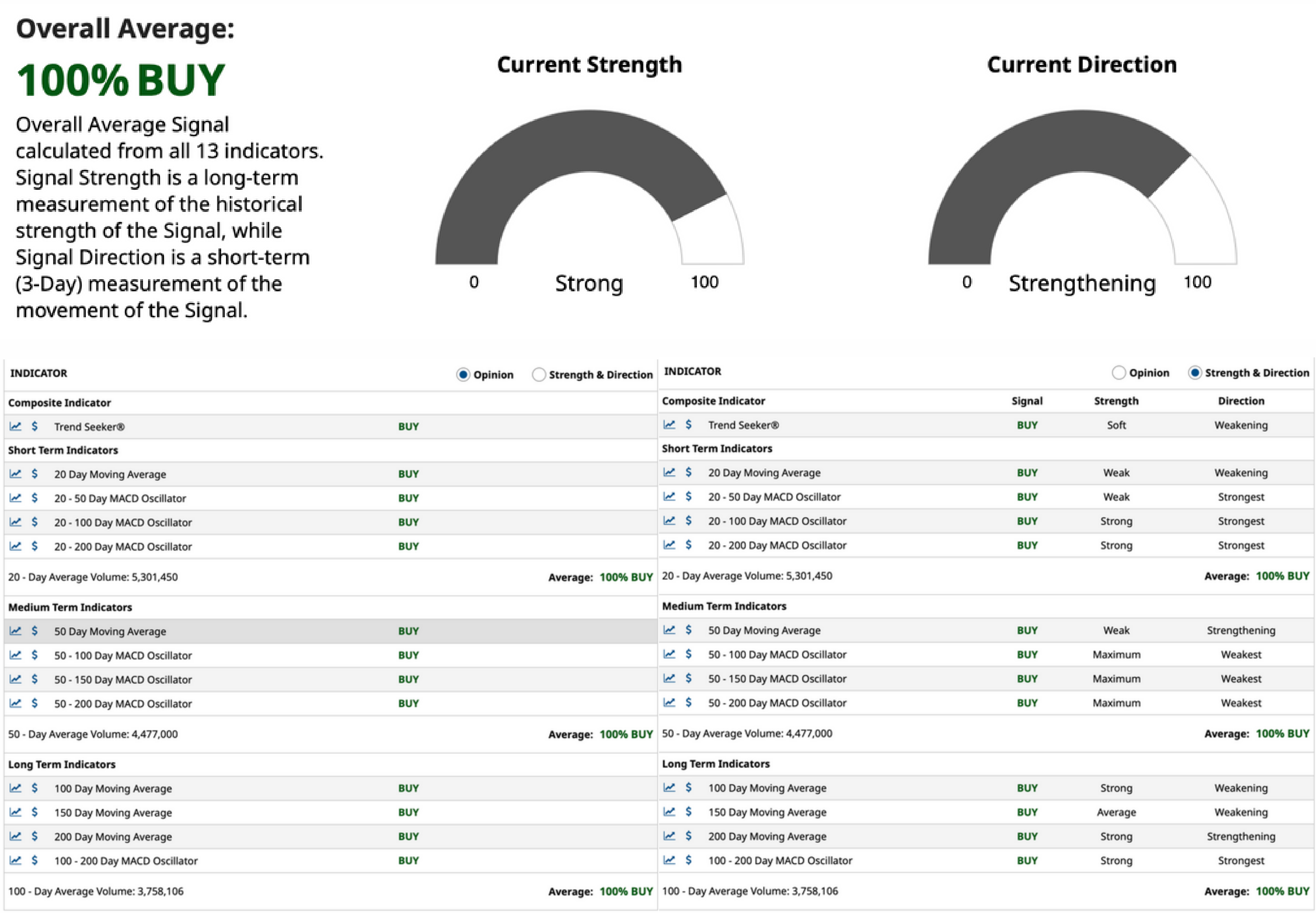
RSI



The RSI, or **Relative Strength Index**, is a technical indicator that **measures the speed and direction of a price movement** to determine whether **an asset is overbought or oversold**. When the RSI is above 70, the asset is considered overbought, which may indicate a risk of reversal to the downside. Conversely, an RSI below 30 indicates that the asset is oversold, suggesting a potential upward turnaround. For **Novo Nordisk shares**, the RSI chart shows a **value of 54.84** for the most recent date, October 25, 2023. This value is between the traditional overbought (70) and oversold (30) thresholds, and slightly above the 50 threshold, indicating **a slightly upward trend**. This value suggests that the stock's current momentum is neither extremely strong nor weak, but is in a neutral zone, leaning slightly to the bullish side. Historically, in recent months, **Novo Nordisk's RSI has fluctuated,** peaking near the overbought level in August and then falling below the 50 threshold, indicating bearish pressure. Recently, the RSI has begun to rise, showing renewed bullish momentum.

Taking into account the values of the RSI, Moving Averages (MA) and Bollinger Bands (BBands) for Novo Nordisk, it seems that the share is showing signs of a **possible short-term bullish recovery.** The RSI, being close to the oversold zone, suggests that **the stock could be undervalued and ready for a rally.** In addition, the share's position relative to the MAs indicates that it is currently in a consolidation phase after a possible decline, and the BBands show that the share is close to the support level. Combining these elements, **Novo Nordisk shares are likely to rise in the short term.**

BARCHART OPINION



Overall Average:

100% BUY

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.

INDICATOR — Opinion

INDICATOR	
Composite Indicator	
Trend Seeker®	BUY
Short Term Indicators	
20 Day Moving Average	BUY
20 - 50 Day MACD Oscillator	BUY
20 - 100 Day MACD Oscillator	BUY
20 - 200 Day MACD Oscillator	BUY
20 - Day Average Volume: 5,301,450	Average: 100% BUY
Medium Term Indicators	
50 Day Moving Average	BUY
50 - 100 Day MACD Oscillator	BUY
50 - 150 Day MACD Oscillator	BUY
50 - 200 Day MACD Oscillator	BUY
50 - Day Average Volume: 4,477,000	Average: 100% BUY
Long Term Indicators	
100 Day Moving Average	BUY
150 Day Moving Average	BUY
200 Day Moving Average	BUY
100 - 200 Day MACD Oscillator	BUY
100 - Day Average Volume: 3,758,106	Average: 100% BUY

INDICATOR — Strength & Direction

Composite Indicator	Signal	Strength	Direction
Trend Seeker®	BUY	Soft	Weakening
Short Term Indicators			
20 Day Moving Average	BUY	Weak	Weakening
20 - 50 Day MACD Oscillator	BUY	Weak	Strongest
20 - 100 Day MACD Oscillator	BUY	Strong	Strongest
20 - 200 Day MACD Oscillator	BUY	Strong	Strongest
20 - Day Average Volume: 5,301,450			Average: 100% BUY
Medium Term Indicators			
50 Day Moving Average	BUY	Weak	Strengthening
50 - 100 Day MACD Oscillator	BUY	Maximum	Weakest
50 - 150 Day MACD Oscillator	BUY	Maximum	Weakest
50 - 200 Day MACD Oscillator	BUY	Maximum	Weakest
50 - Day Average Volume: 4,477,000			Average: 100% BUY
Long Term Indicators			
100 Day Moving Average	BUY	Strong	Weakening
150 Day Moving Average	BUY	Average	Weakening
200 Day Moving Average	BUY	Strong	Strengthening
100 - 200 Day MACD Oscillator	BUY	Strong	Strongest
100 - Day Average Volume: 3,758,106			Average: 100% BUY

Overall average signal: The average signal across all 13 indicators is 100% BUY. This indicates strong bullish sentiment across a variety of technical indicators.

Current strength: The visual representation of the stock's strength appears to be at a maximum, suggesting that the historical strength of the signal is robust.

Current direction: The direction indicates that the signal is "strengthening". This means that in the short term (3-day measurement), the signal's movement is gaining momentum in the bullish direction.

Short-term indicators: All indicators such as the Trend Seeker, moving averages and MACD oscillators suggest "BUY". Although the strength of some indicators is "weak", the 100-day and 200-day MACD oscillators show "strong" and "strongest" strengths, respectively. This indicates that, despite short-term fluctuations, longer-term indicators are promising.

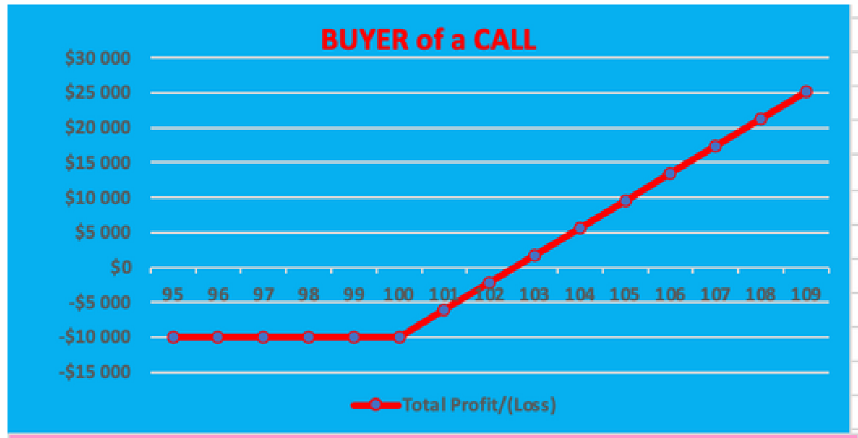
Medium-term indicators: All indicators, including the 50-day moving average and MACD oscillators, suggest a "BUY". The strength of the 100- and 150-day oscillators is at its "maximum", although their direction is "weakest", suggesting a possible slowdown or consolidation in the medium term.

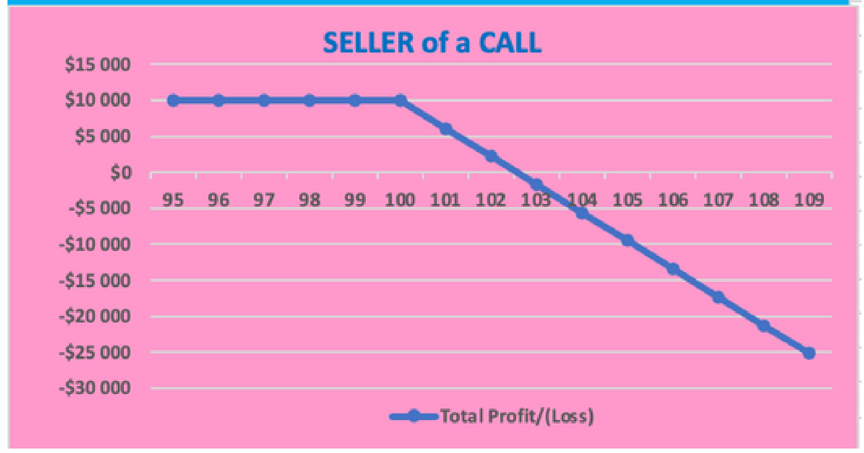
Long-term indicators: The 100, 150 and 200 day moving averages and the 100-200-day MACD oscillator are all "buy". The 100-day moving average is "strong" but its direction is weakening, while the 100-200-day MACD oscillator is "strong" and shows the "strongest" direction.

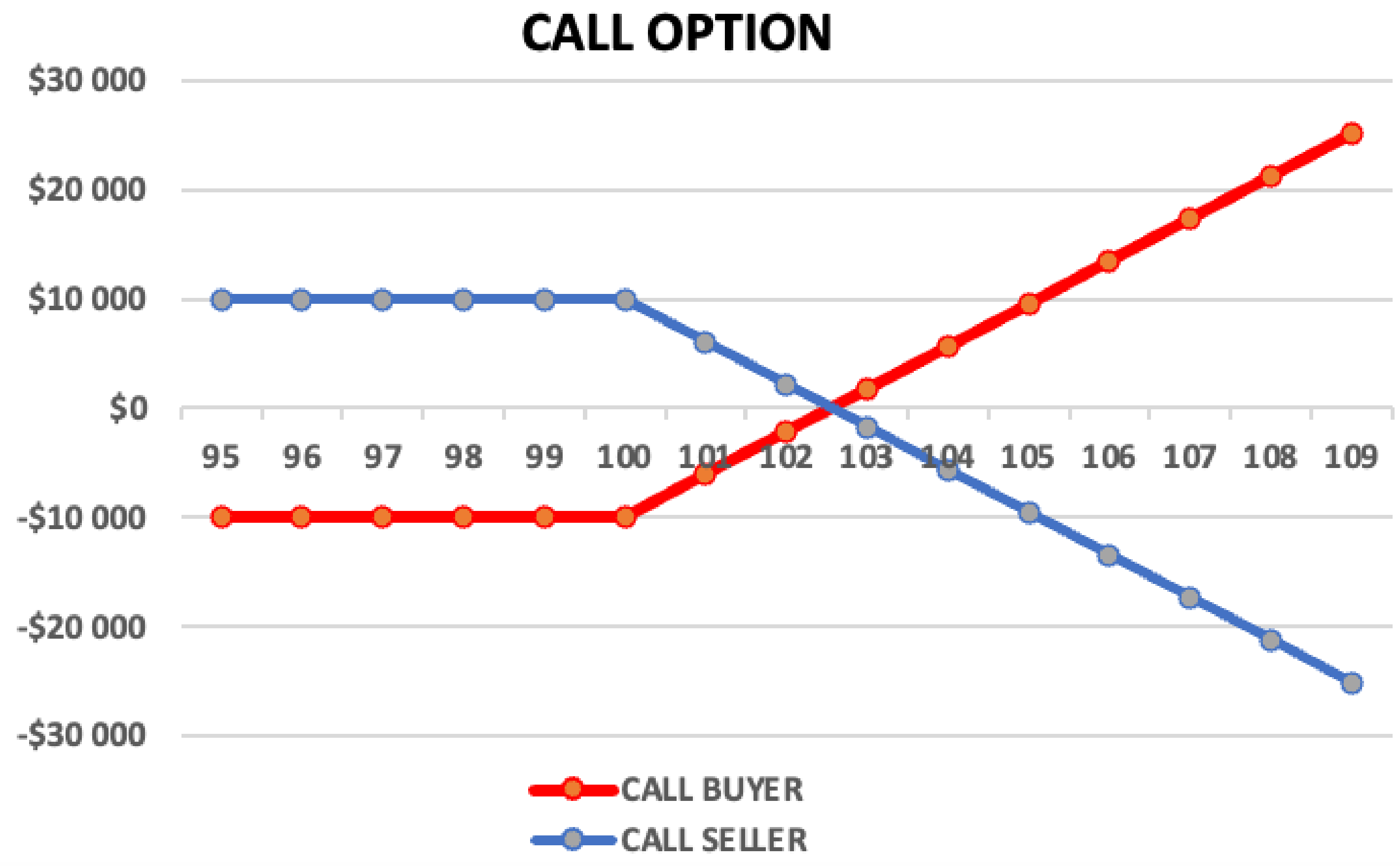
Barchart.com's overview suggests strong bullish sentiment for Novo Nordisk across short-, medium- and long-term indicators. Most indicators point to a "BUY", with many having strong or maximum strength. Although there are signs of weakening direction for a few indicators, the overall picture remains largely positive.

OPTION CHART

CALL BUYER=LONG CALL															
Share Price	$95	$96	$97	$98	$99	$100	$101	$102	$103	$104	$105	$106	$107	$108	$109
Sell	$95,00	$96,00	$97,00	$98,00	$99,00	$100,00	$101,00	$102,00	$103,00	$104,00	$105,00	$106,00	$107,00	$108,00	$109,00
Buy	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00
GM (Gross margin)	-$5,00	-$4,00	-$3,00	-$2,00	-$1,00	$0,00	$1,00	$2,00	$3,00	$4,00	$5,00	$6,00	$7,00	$8,00	$9,00
GM adj	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$1,0000	$2,0000	$3,0000	$4,0000	$5,0000	$6,0000	$7,0000	$8,0000	$9,0000
-OP	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600
Profit/(Loss)	-$2,5600	-$2,5600	-$2,5600	-$2,5600	-$2,5600	-$2,5600	-$1,5600	-$0,5600	$0,4400	$1,4400	$2,4400	$3,4400	$4,4400	$5,4400	$6,4400
Total Profit/(Loss)	-$9 984,00	-$9 984,00	-$9 984,00	-$9 984,00	-$9 984,00	-$9 984,00	-$6 084,00	-$2 184,00	$1 716,00	$5 616,00	$9 516,00	$13 416,00	$17 316,00	$21 216,00	$25 116,00
What if	$95,00	$96,00	$97,00	$98,00	$99,00	$100,00	$101,00	$102,00	$103,00	$104,00	$105,00	$106,00	$107,00	$108,00	$109,00
CALL SELLER (Writer)=SHORT CALL															
Sell	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00	$100,00
Buy	$95,00	$96,00	$97,00	$98,00	$99,00	$100,00	$101,00	$102,00	$103,00	$104,00	$105,00	$106,00	$107,00	$108,00	$109,00
GM	$5,000	$4,000	$3,000	$2,000	$1,000	$0,000	-$1,000	-$2,000	-$3,000	-$4,000	-$5,000	-$6,000	-$7,000	-$8,000	-$9,000
GM adj	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	-$1,0000	-$2,0000	-$3,0000	-$4,0000	-$5,0000	-$6,0000	-$7,0000	-$8,0000	-$9,0000
+OP	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600
Profit/(Loss)	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$2,5600	$1,5600	$0,5600	-$0,4400	-$1,4400	-$2,4400	-$3,4400	-$4,4400	-$5,4400	-$6,4400
Total Profit/(Loss)	$9 984,00	$9 984,00	$9 984,00	$9 984,00	$9 984,00	$9 984,00	$6 084,00	$2 184,00	-$1 716,00	-$5 616,00	-$9 516,00	-$13 416,00	-$17 316,00	-$21 216,00	-$25 116,00







CALCULATIONS

BREAKEVEN

to calculate the breakeven point, we need to add the strike price to the option price. In our case, $100+$3.3. This gives us $103.3.

NUMBER OF CONTRACTS

Our maximum purchase amount is $10,000. So to find out the total number of contracts we can buy, we do investment amount/(option price*number of contract): 39. So we can buy 39 Novo Nordisk call option contracts.

Novo Nordisk	Call	Put	Contract	
Strike Price	$100,0000	$100,0000	100	shares
Option Price	$2,5600	$2,5600		
Breakeven	$102,5600	$97,4400		
Number of Contracts	39	39		

LEVERAGE

Number of shares in stock market: 9910/95 = **104**

Leverage: 3900/104 = **37.5**

NO CHANGE IN STOCK PRICE

Stock Market performance: 0%

ROI: 0%

Option performance: -$9,900

ROI: -100%

STOCK PRICE RAISE BY $10

Stock Market performance: +10,5%

ROI: 10.49%

Option performance: $5,100

ROI: 51.51%

STOCK PRICE FALL BY $10

Stock Market performance: -10,5%

ROI: -10.49%

Option performance: -$9,900

ROI: -100%

STOCKTRAK CONFIRMATION

NVO

LAST PRICESS	DAY'S CHANGE	BID/ASK
95.20	-2.23	94.35/94.42
DAY'S RANGE	**DAY'S VOLUME**	
94.58 - 96.21	4,237	

Buy | **Sell To Open** | **Buy To Close** | **Sell**

CALL / PUT	EXPIRY	STRIKE (show all)
Call	12/15/2023	100

30 CONTRACTS

ORDER TYPE	LIMIT/STOP PRICE	DURATION
Market	$0.00	Good for Day

Estimated Order Total
$9,910.00

Review Order

Option Details For NVO2315L100

Last Price	3.30
Day's Change	-0.9
Bid/Ask	3.10 / 3.30
Day's Range	2.80 - 3.40
Day's Volume	81

Option Payout Diagram

ORDER DATE	ORDER	SYMBOL	QTY	ORDER PRICE	TRADE PRICE	TYPE	CURRENCY	STATUS	EXP. DATE
10/27/2023 **Cancel**	Market-Buy	**NVO2315L100**	39	MKT	Open	Options	USD	Open	GTC

OPTION 2
CALL MICROSOFT

Océane Rozniatowski

OPTION SYMBOL

Option Details For MSFT2315L340

CORRECT SYMBOL MSFT121523C00337500

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is MSFT.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd).
- In our case, the expiration date shoud be represented as followed: **121523**

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a call so it should be represented as C

STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $337.5 so it should be represented as 00337500

FUNDAMENTAL ANALYSIS

INDUSTRY

INDUSTRY:
The technology industry is one of the most dynamic and influential sectors of the global economy. It encompasses a wide range of companies that design, develop and market technology products and services, from Silicon Valley giants to innovative start-ups.

INDUSTRY LEADER:
Apple, Microsoft, Alphabet Inc, Amazon, Nvidia and Meta platform Inc

INDUSTRY KEY NUMBERS:
Total sales: $5.999B
Growth: 4.7%
Market share: North America (36%), Europe (11%) China (11%)

COMPANY

COMPANY:
Microsoft is a prominent American technology corporation, highly regarded for its software products, including the Windows operating system, Office Suite, and cloud services such as Azure. It is a diversified company with a substantial presence in various tech-related sectors, providing software, hardware, and cloud solutions worldwide.

COMPANY KEY NUMBERS:
Total revenue: $56,52B
Workforce: 221 000
Market share: 12.77%
Beta: 0.90
PER: 32,60

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 22.69
Return on Equity TTM: 63.35%
Gross Margin TTM: 57.84%
Total Debt to Equity MRQ: 335.56%
Price to Book MRQ: 32.83

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 31.61
Return on Equity TTM: 39.11%
Gross Margin TTM: 69.44%
Total Debt to Equity MRQ: 38.51%
Price to Book MRQ: 11.04

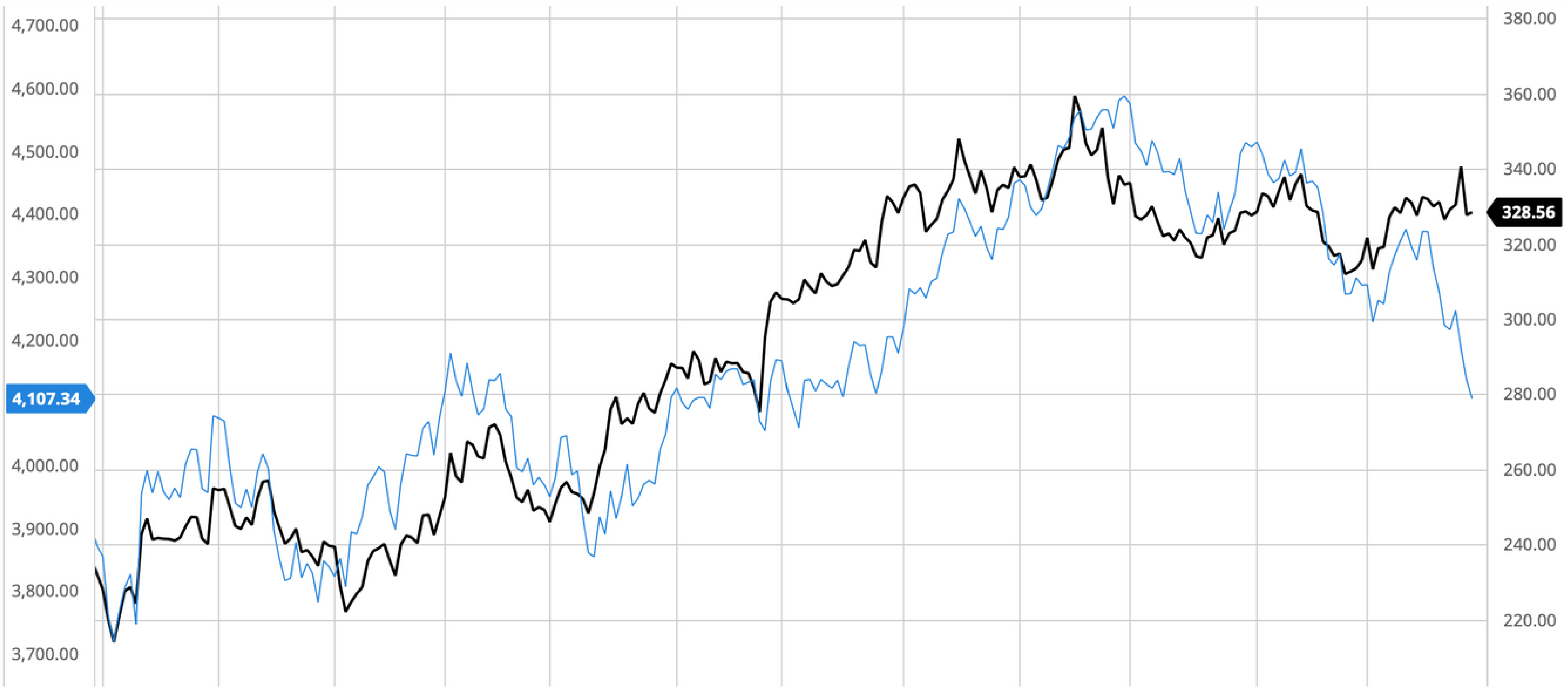
Microsoft's P/E ratio is considerably **higher than the industry average.** This could indicate **that investors are willing to pay a higher price for Microsoft's future earning**s,It also indicates investor confidence in the company's growth prospects. Microsoft's **Return on Equity** TTM is also **impressive**, at 39.11%, which is above the industry average of 63.35%. This means that Microsoft is able to generate a **favorable return on invested equity**, even if it is slightly below the industry average. Another key aspect is the total debt/equity ratio, where Microsoft stands out favorably with a ratio well below the industry average. This means that Microsoft has a more **balanced capital structure**, **less dependent on debt,** which reduces financial risk.
Finally, Microsoft's Price to Book MRQ is 11.04, which is below the industry average of 32.83. This means that investors are paying a smaller premium to the company's book value, which is **positive**.

On the basis of these ratios, Microsoft appears **to outperform the sector average** in terms of return on equity, margins, prudent debt management and a P/E ratio above the industry average. These elements indicate that Microsoft is a solid and attractive investment for investors looking fo**r stability and growth potential** in the sector.

PRICE HISTORY

ONE YEAR PERFORMANCE:

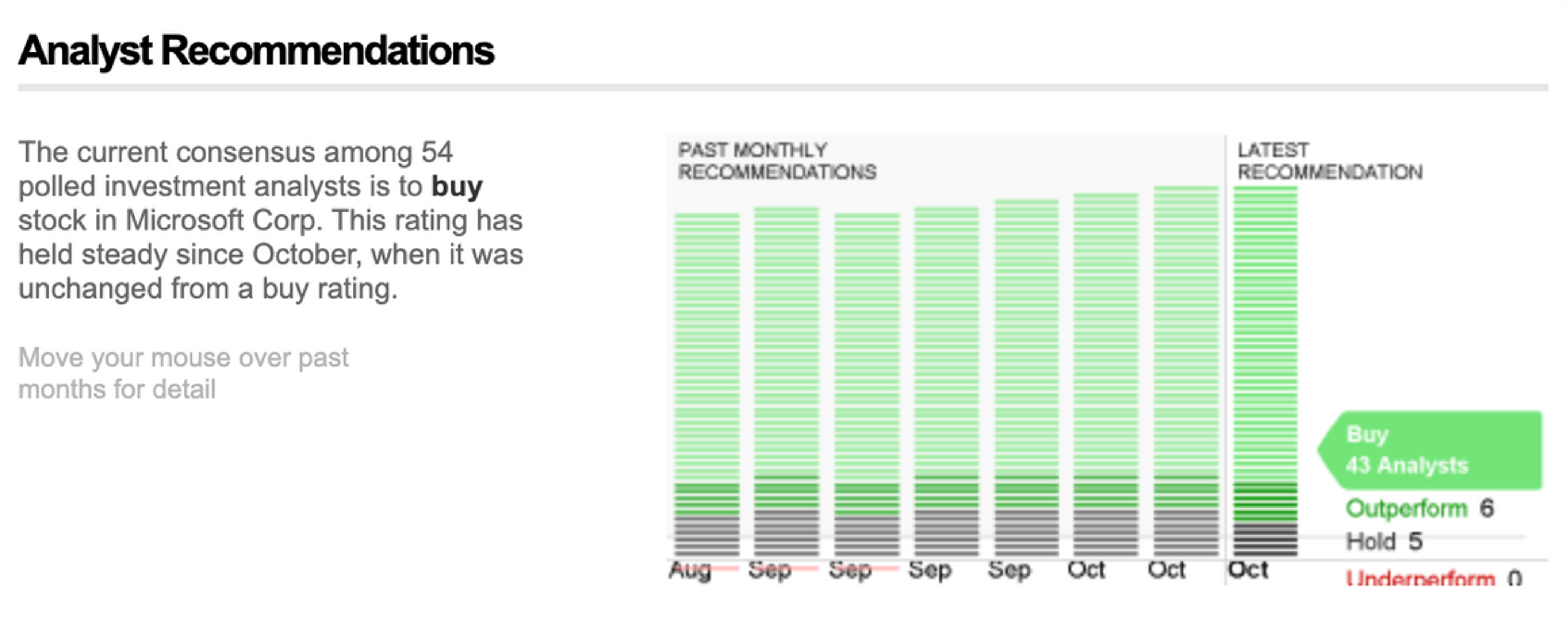
SP500 (blue line): 9.30%
Microsoft (black line): 45.29%



Over the past year, Microsoft has clearly outperformed the S&P 500 index. The chart shows a **45.29% increase** for Microsoft, compared with a **modest 9.30% rise** for the **S&P 500**. A number of factors, such as robust financial results, strategic developments and innovations, could be behind this favorable dynamic for Microsoft.

This year, compared with the S&P 500 index, Microsoft's brilliant trajectory demonstrates that the company is **in step with the times and proactive in** the face of market challenges. While Microsoft has taken advantage of its opportunities, other players have probably faced greater challenges.

CONSENSUS RECOMMENDATION



To understand how the recommendation rate is calculated, we will use the weighted average method. We'll give each category a value that will increase its weight in the final calculation.

Buy: 1, Outperform: 2, Hold: 3 Underperform: 4 Sell: 5

We will then count the number of analyst opinions by multiplying them by their weight.

Buy signal = 43, Outperform = 12 Hold = 15,
Underperform = 0, Sell = 0

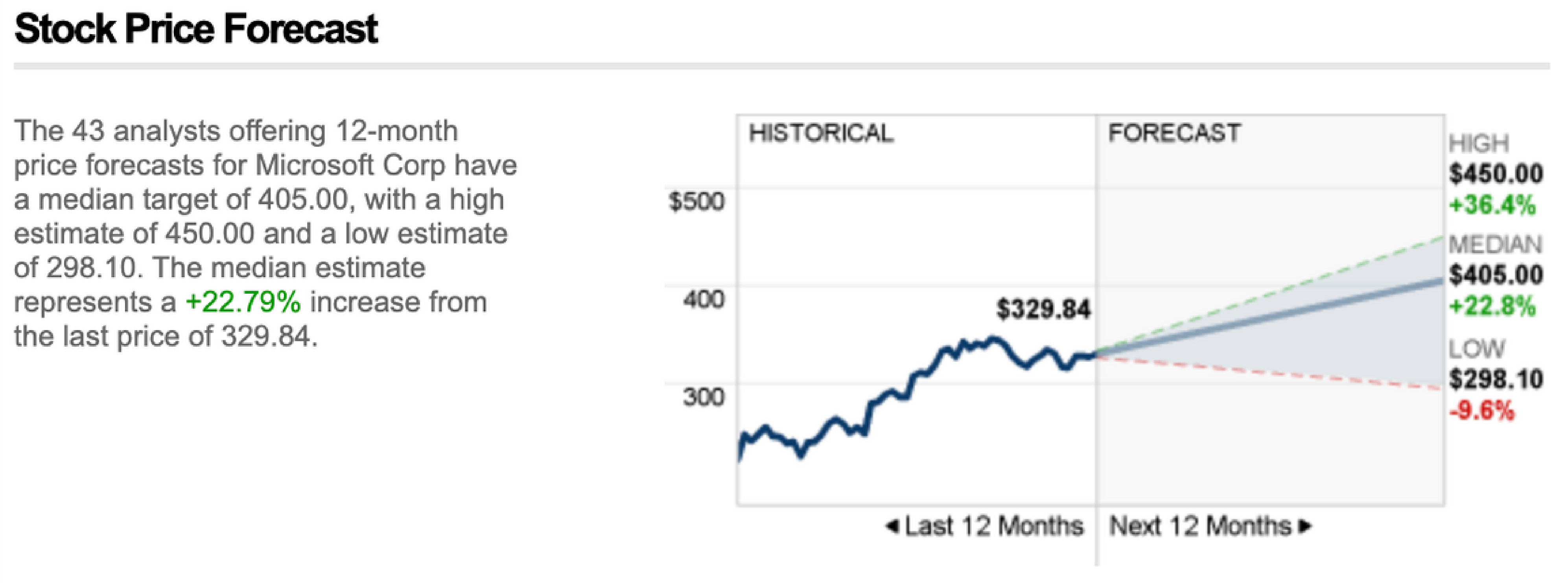
We then add up all the products = 69/total recommendations

70 ÷ 54 = 1.29

Analyst recommendations for the Microsoft company reveals a notable shift in the average weighting between August 2023 and October 2023. In August 2023, the consensus was **1.44**, suggesting a **strong Buy recommendation.** However, by October 2023, this figure had **fallen to 1.29.** This decline indicates that analysts have become more **optimistic** about Microsoft's near-term **growth potential**, **reinforcing their confidence in the company.**

This move to a lower rating reflects an increased perception of Microsoft's value and potential in the market. This could be the result of **solid financial performance**, **successful innovation**, or a combination of both in recent months. For investors, this trend reinforces the idea that Microsoft is currently **well-positioned** in its sector.

TARGET PRICE



ANALYST ESTIMATES:
An overwhelming majority of analysts agree that Microsoft's share price has strong short-term appreciation potential. Opinions differ, but optimism prevails.

MEDIAN ESTIMATE:
With a median estimate set at $405.00, an anticipated increase of 22.79% on the last recorded price of $329.84, the message is clear: analysts expect strong growth.

HIGH AND LOW ESTIMATES:
The highest estimate is for a price of $450.00, reflecting a remarkable increase of 36.4%. On the other hand, even the lowest estimate, at $298.10, shows only a modest decline of 9.6%. This suggests that downside risk is considered minimal compared to growth potential.

SUMMARY:
The data are unequivocal: analysts are overwhelmingly convinced that Microsoft shares are on course for significant appreciation in the months ahead. Investors would be wise to take this palpable optimism into account when considering their next investment decisions. However, it remains essential to monitor market conditions and be aware that forecasts can change.

HOT NEWS

ARTICLE

The article shows that Microsoft and NVIDIA recently announced a 10-year partnership that promises to bring significant benefits to investors interested in Microsoft calls. The collaboration aims to make Xbox PC games available on the NVIDIA GeForce NOW cloud gaming service, which has more than 25 million members in over 100 countries.

The agreement between these two technology giants opens up new prospects for Microsoft. It should lead to a significant increase in its results, sales and turnover.

The agreement will extend access to Xbox PC games across a range of devices, including PCs, macOS, Chromebooks and smartphones, significantly expanding the potential audience. In addition, it includes Activision Blizzard's PC titles, including the popular Call of Duty, which will be available for streaming via GeForce NOW following Microsoft's acquisition of Activision, further enhancing the appeal of the service.

In addition, NVIDIA has expressed its support for Microsoft's acquisition of Activision Blizzard, reinforcing its confidence in the success of this merger.

CONCLUSION :

In summary, this partnership between **Microsoft** and **NVIDIA** represents an **attractive opportunity for investors**. It is expected to drive Microsoft's growth by broadening access to Xbox PC games via GeForce NOW, **attracting a wider audience.** This expansion is expected to have a positive impact on Microsoft's **bottom line, game sales and revenue, which is promising for our investment.**

STRATEGY

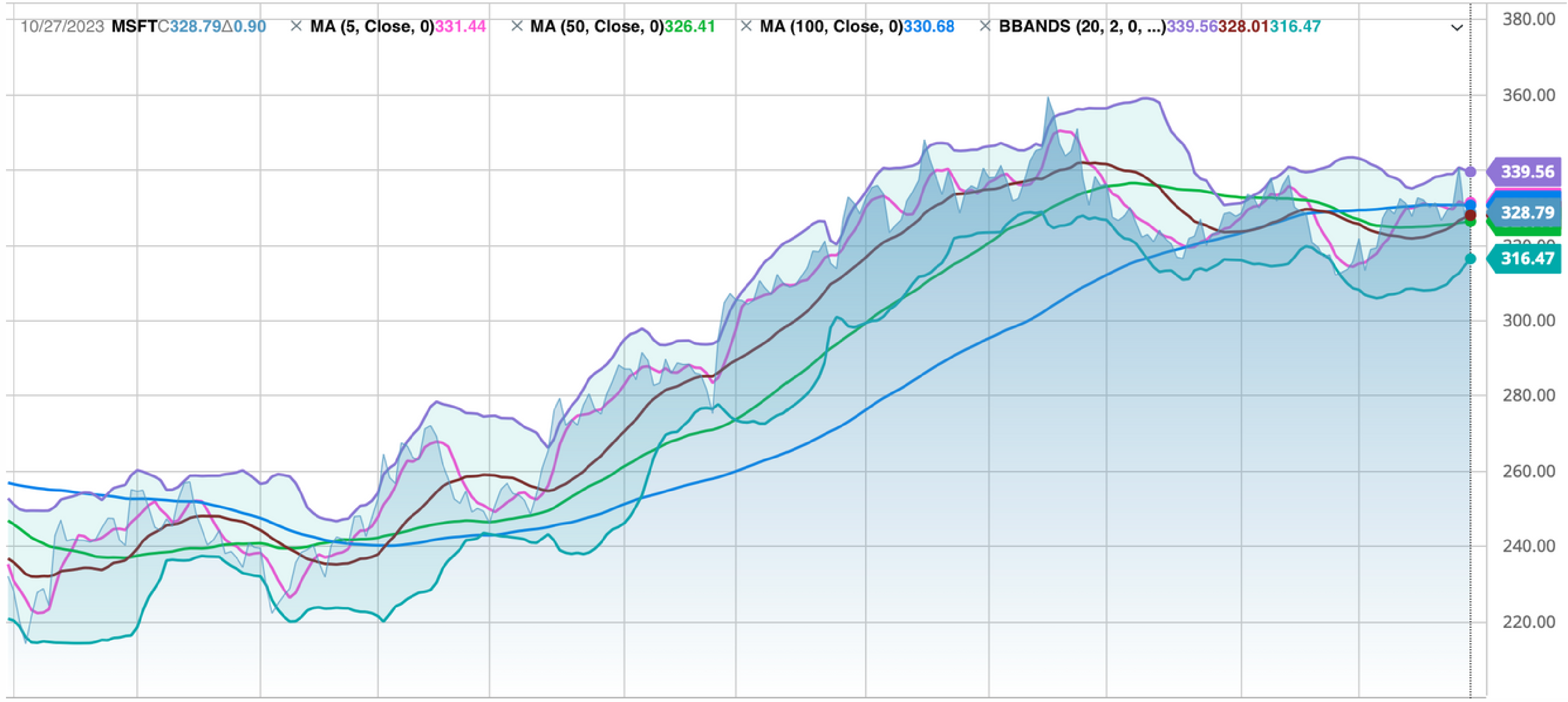
WHY HAVE YOU CHOSEN THIS OPTION STRATEGY?

Our decision to invest **$10,000** in a Microsoft call was based on a thorough analysis of financial data and current market trends. We based our decision on several key factors.

- **SECTOR:** Microsoft is well positioned in the technology industry, which is one of the most dynamic and influential sectors of the global economy. This encompasses a wide variety of companies, from Silicon Valley giants to innovative start-ups.
- **Financial ratios**: Taken together, these financial ratios indicate that Microsoft outperforms the industry average in terms of profitability, margins, prudent debt management and P/E ratio. All these elements reinforce our conviction that Microsoft is a solid investment.
- **Recommendations:** In addition, analysts' recommendations show a positive trend, reinforcing their confidence in the company. This trend is explained by Microsoft's solid financial performance and successful innovation.

IIn summary, our investment strategy for Microsoft is underpinned by strong financial ratios and increased confidence in the company's prospects. We are convinced that Microsoft is well positioned in its sector, which reinforces our conviction in this investment. Although certain indicators may show contradictory signals, our analysis as a whole justifies our decision to invest in Microsoft.

MOVING AVERAGE AND BOLLINGER BANDS



MOVING AVERAGES (MA) :

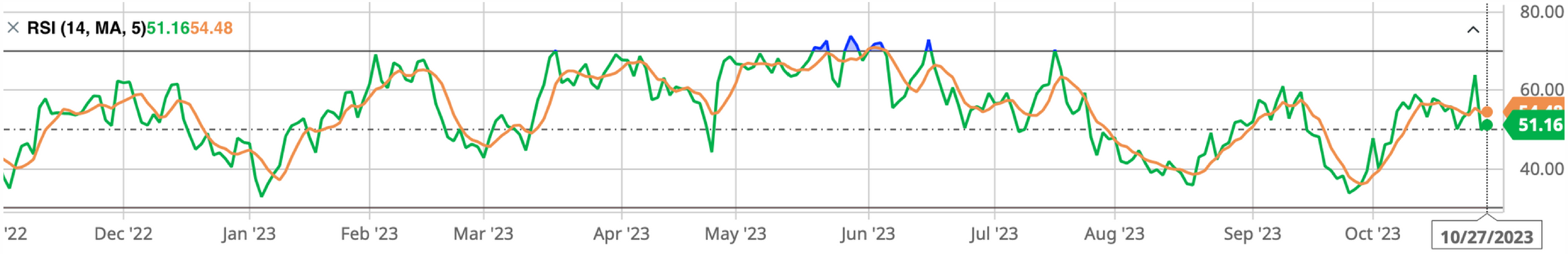
- **MA5**: At **331.44**, it is above the current Microsoft share price of 328.79, indicating short-term bearish momentum.
- **MA50**: At **326.41**, it is below the MM5 but still above the current share price, suggesting a potential support level in the short to medium term.
- **MA100**: At **330.68**, this moving average is slightly above the current level, reflecting a long-term uptrend. It could serve as a solid support point in the event of a sharp drop in the share price.

BOLLINGER BANDS (BBANDS) :

- **Upper band:** Located at **339.56**, it symbolizes a potentially overbought level where the price could encounter resistance.
- **Middle band:** At **328.01**, this is close to the current share price and could serve as a short-term indicator of price direction.
- **Lower band:** At **316.47**, if the price reaches this value, it could mean that the share is in oversold condition and could rebound soon.

The current **share price, at 328.79,** lies between the MA5 and the MA100, showing a **balance of forces between buyers and sellers.** Nevertheless, the fact that it is close to the median band of the Bollinger Bands suggests a potential short-term upward movement. We must be cautious, though, as the price is also close to the MA5, indicating possible bearish pressure.

RSI



The RSI, or relative strength index, is a technical indicator that measures the speed and direction of a price movement to determine whether an asset is overbought or oversold. When the RSI is above 70, the asset is considered overbought, which may indicate a risk of downward reversal. Conversely, an RSI below 30 indicates that the asset is oversold, suggesting a potential upward turnaround. In the chart shown, the RSI is **51.16** for the most recent date, October 27, 2023. This value lies between the traditional overbought (70) and oversold (30) thresholds, and slightly above the median line at 50, suggesting a slight bullish tilt. This means that the asset's current momentum is balanced, with no strong bullish or bearish trends. Historically, throughout the year, RSI has seen several **peaks and troughs,** reaching near-overbought conditions in June and July, followed by a decline below the median line, indicating bearish sentiment. More recently, the RSI has started to rise again, indicating renewed bullish momentum.

Looking at the RSI, moving averages (MAs) and Bollinger Bands (BBands) for Microsoft, it seems that the stock could be setting itself up for short-term bullish momentum. The RSI, positioned slightly above the midpoint, **indicates balanced sentiment with a slight upward trend.** In addition, Microsoft's current share price is close to the MA50, suggesting that it is going **through a period of stabilization**, perhaps after a slight downtrend. The BB bands also indicate that the **stock is not far from its median band,** signaling a balanced price movement. Taking this information into account, Microsoft shares look set for a **potential uptrend over the next few sessions.**

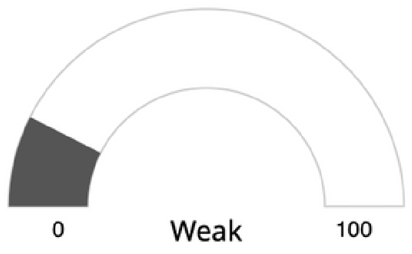
BARCHART OPINION

Overall Average:

56% BUY

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.

Current Strength



Current Direction

INDICATOR — Opinion

Composite Indicator		
Trend Seeker®	BUY	
Short Term Indicators		
20 Day Moving Average	BUY	
20 - 50 Day MACD Oscillator	BUY	
20 - 100 Day MACD Oscillator		SELL
20 - 200 Day MACD Oscillator	BUY	
20 - Day Average Volume: 24,601,859		Average: 50% BUY
Medium Term Indicators		
50 Day Moving Average	BUY	
50 - 100 Day MACD Oscillator		SELL
50 - 150 Day MACD Oscillator	BUY	
50 - 200 Day MACD Oscillator	BUY	
50 - Day Average Volume: 22,311,188		Average: 50% BUY
Long Term Indicators		
100 Day Moving Average		SELL
150 Day Moving Average	BUY	
200 Day Moving Average	BUY	
100 - 200 Day MACD Oscillator	BUY	
100 - Day Average Volume: 25,088,252		Average: 50% BUY

INDICATOR — Strength & Direction

Composite Indicator	Signal	Strength	Direction
Trend Seeker®	BUY	Weak	Weakening
Short Term Indicators			
20 Day Moving Average	BUY	Weak	Weakening
20 - 50 Day MACD Oscillator	BUY	Weak	Strongest
20 - 100 Day MACD Oscillator	SELL	Weak	Weakest
20 - 200 Day MACD Oscillator	BUY	Soft	Strongest
20 - Day Average Volume: 24,601,859			Average: 50% BUY
Medium Term Indicators			
50 Day Moving Average	BUY	Weak	Weakening
50 - 100 Day MACD Oscillator	SELL	Weak	Weakest
50 - 150 Day MACD Oscillator	BUY	Weak	Weakest
50 - 200 Day MACD Oscillator	BUY	Soft	Weakest
50 - Day Average Volume: 22,311,188			Average: 50% BUY
Long Term Indicators			
100 Day Moving Average	SELL	Weak	Strengthening
150 Day Moving Average	BUY	Weak	Weakening
200 Day Moving Average	BUY	Soft	Weakening
100 - 200 Day MACD Oscillator	BUY	Strong	Weakest
100 - Day Average Volume: 25,088,252			Average: 50% BUY

Overall average signal: The average signal across all 13 indicators is 56% BUY. This indicates a moderate bullish sentiment across a variety of technical indicators.

Current strength: Current strength: The visual representation of the stock's strength is approximately at 15% out of 100%, indicating a relatively weak historical strength of the signal.

Current direction: The direction indicates that the signal is "weakening". This means that in the short term (3-day measurement), the signal's movement is losing momentum, suggesting a potential bearish change.

Short-term indicators: Most indicators such as the Trend Seeker and the 20-day moving average suggest "BUY". However, the 20- and 50-day MACD oscillators indicate "SELL". While the strength of some indicators is "weak", the 200-day MACD oscillator shows "soft" strength, signalling potential short-term ambiguity.

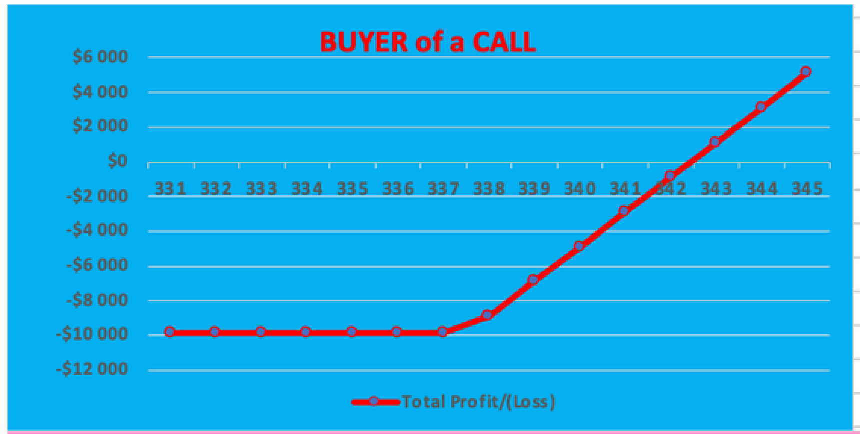
Medium-term indicators: The 50-day moving average leans towards the "SELL" position, but the two MACD oscillators for the 50-100-day and 50-150-day periods suggest the "BUY" position. The 50-150-day MACD oscillator shows "gentle" strength, but its direction is "weakest", indicating potential consolidation or a slow medium-term trend.

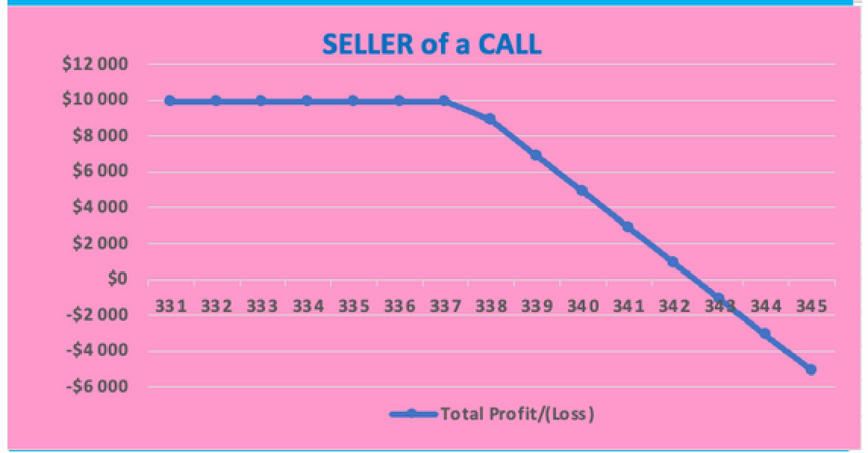
Long-term indicators: The 100-, 150- and 200-day moving averages and the 100-200-day MACD oscillator are all pointing towards "BUY". The 150-day moving average shows "weak" strength with "strengthened" direction, while the 100-200-day MACD oscillator shows "strong" strength with "weakest" direction.

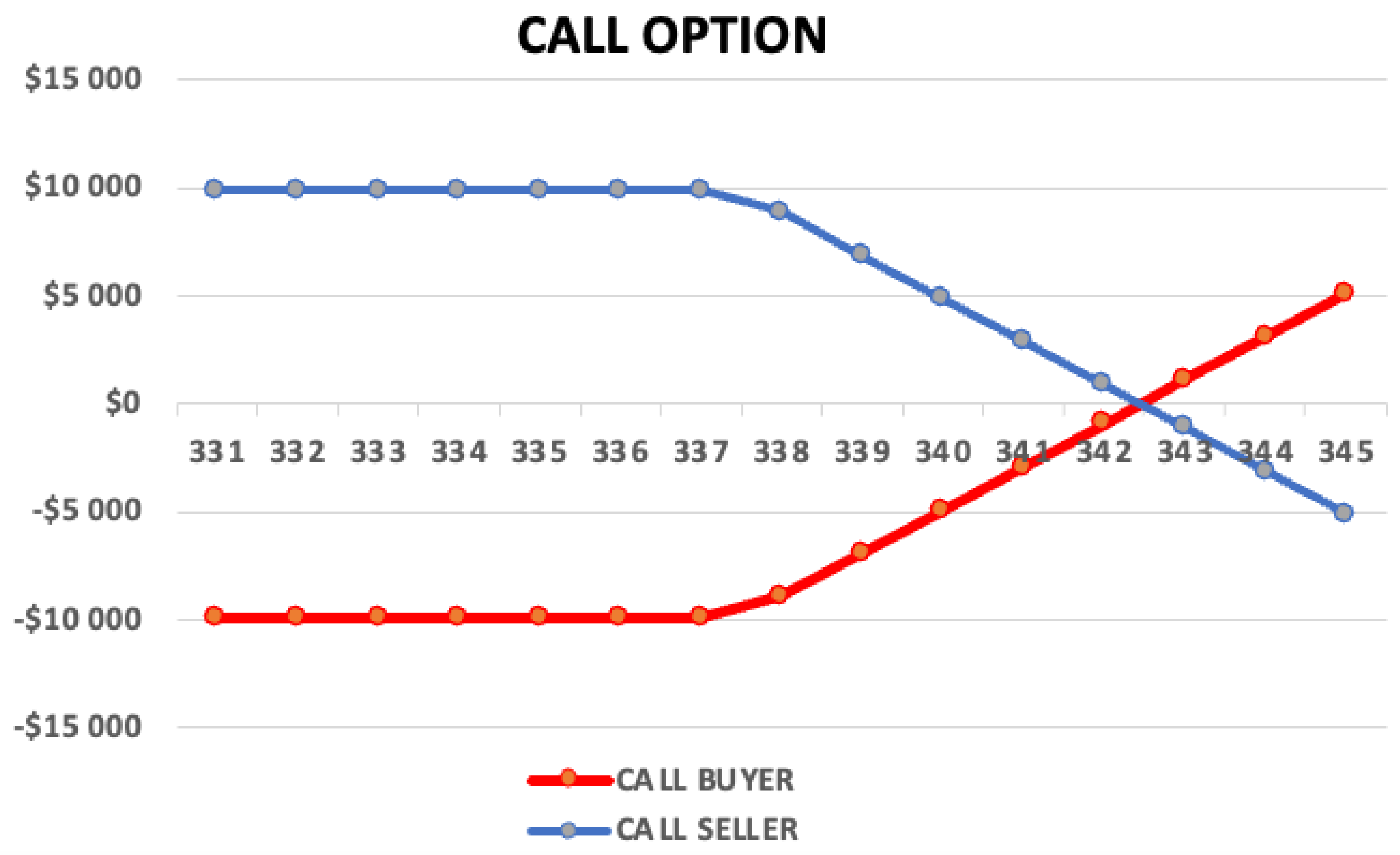
Barchart.com's overall view implies mixed sentiment for Microsoft across short-, medium- and long-term indicators. While a majority of indicators lean towards "BUY", some crucial ones indicate "SELL". Despite the weakening of the current direction, many indicators show strong or weak strength. Overall, the outlook requires careful monitoring due to conflicting signals.

OPTION CHART

CALL BUYER=LONG CALL															
Share Price	$331	$332	$333	$334	$335	$336	$337	$338	$339	$340	$341	$342	$343	$344	$345
Sell	$331,00	$332,00	$333,00	$334,00	$335,00	$336,00	$337,00	$338,00	$339,00	$340,00	$341,00	$342,00	$343,00	$344,00	$345,00
Buy	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50
GM (Gross margin)	-$6,50	-$5,50	-$4,50	-$3,50	-$2,50	-$1,50	-$0,50	$0,50	$1,50	$2,50	$3,50	$4,50	$5,50	$6,50	$7,50
GM adj	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,5000	$1,5000	$2,5000	$3,5000	$4,5000	$5,5000	$6,5000	$7,5000
-OP	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500
Profit/(Loss)	-$4,9500	-$4,9500	-$4,9500	-$4,9500	-$4,9500	-$4,9500	-$4,9500	-$4,4500	-$3,4500	-$2,4500	-$1,4500	-$0,4500	$0,5500	$1,5500	$2,5500
Total Profit/(Loss)	-$9 900,00	-$9 900,00	-$9 900,00	-$9 900,00	-$9 900,00	-$9 900,00	-$9 900,00	-$8 900,00	-$6 900,00	-$4 900,00	-$2 900,00	-$900,00	$1 100,00	$3 100,00	$5 100,00
What if	$331,00	$332,00	$333,00	$334,00	$335,00	$336,00	$337,00	$338,00	$339,00	$340,00	$341,00	$342,00	$343,00	$344,00	$345,00
CALL SELLER (Writer)=SHORT CALL															
Sell	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50	$337,50
Buy	$331,00	$332,00	$333,00	$334,00	$335,00	$336,00	$337,00	$338,00	$339,00	$340,00	$341,00	$342,00	$343,00	$344,00	$345,00
GM	$6,500	$5,500	$4,500	$3,500	$2,500	$1,500	$0,500	-$0,500	-$1,500	-$2,500	-$3,500	-$4,500	-$5,500	-$6,500	-$7,500
GM adj	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	-$0,5000	-$1,5000	-$2,5000	-$3,5000	-$4,5000	-$5,5000	-$6,5000	-$7,5000
+OP	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500
Profit/(Loss)	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,9500	$4,4500	$3,4500	$2,4500	$1,4500	$0,4500	-$0,5500	-$1,5500	-$2,5500
Total Profit/(Loss)	$9 900,00	$9 900,00	$9 900,00	$9 900,00	$9 900,00	$9 900,00	$9 900,00	$8 900,00	$6 900,00	$4 900,00	$2 900,00	$900,00	-$1 100,00	-$3 100,00	-$5 100,00







CALCULATIONS

BREAKEVEN

to calculate the breakeven point, we need to add the strike price to the option price. In our case, $337.5+$4.95. This gives us $342.45.

NUMBER OF CONTRACTS

Our maximum purchase amount is $10,000. So to find out the total number of contracts we can buy, we do investment amount/(option price*number of contract): 20. So we can buy 20 Novo Nordisk call option contracts.

Novo Nordisk	Call	Put	Contract	
Strike Price	$337,5000	$337,5000	100	shares
Option Price	$4,9500	$4,9500		
Breakeven	$342,4500	$332,5500		
Number of Contracts	20	20		

LEVERAGE

Number of shares in stock market: 9910/330 = **30.03**
Leverage: 2000/30.03 = **66.6**

NO CHANGE IN STOCK PRICE

Stock Market performance: 0%
ROI: 0%

Option performance: -$9,900
ROI: -100%

STOCK PRICE RAISE BY $10

Stock Market performance: 3%
ROI: 3%

Option performance: -$4,900
ROI: -51%

STOCK PRICE FALL BY $10

Stock Market performance: -3%
ROI: -3%%

Option performance: -$9,900
ROI: -100%

STOCKTRAK CONFIRMATION

MSFT

LAST PRICESS	DAY'S CHANGE	BID/ASK
332.37	4.48	332.36/332.39
DAY'S RANGE	**DAY'S VOLUME**	
329.80 - 336.72	15,233,683	

Buy | **Sell To Open** | **Buy To Close** | **Sell**

CALL / PUT	EXPIRY	STRIKE (show all)
Call	12/15/2023	340

1 CONTRACTS

ORDER TYPE	LIMIT/STOP PRICE	DURATION
Market	$0.00	Good for Day

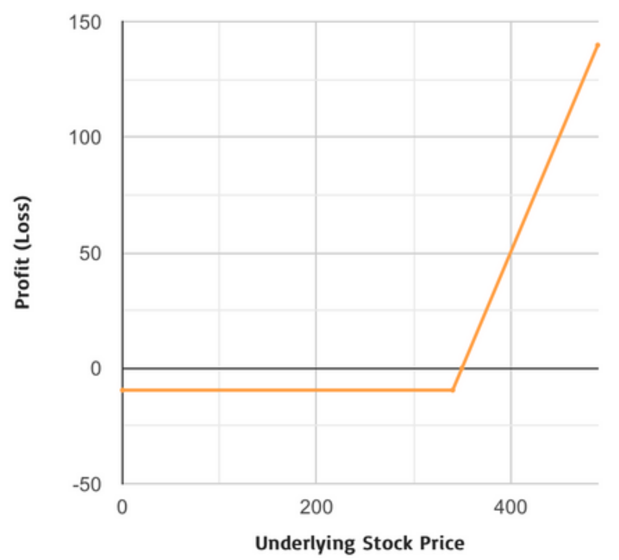
Estimated Order Total
$950.00

Review Order

Option Details For MSFT2315L340

Last Price	9.50
Day's Change	1.39
Bid/Ask	9.50 / 9.55
Day's Range	8.86 - 11.53
Day's Volume	951

Option Payout Diagram



10/27/2023 **Cancel**	Market-Buy	**MSFT2317K337.5**	20	MKT	Open	Options	USD	Open	GTC

OPTION 3
PUT PFIZER

Charles Milliand

OPTION SYMBOL

Option Details For PFE2315X29

CORRECT SYMBOL PFE121523P000290000

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is PFE.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd).
- In our case, the expiration date shoud be represented as followed: **121523**

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a Put so it should be represented as P

STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $29 so it should be represented as 00029000

FUNDAMENTAL ANALYSIS

INDUSTRY

INDUSTRY:
The pharmaceutical industry is one of the world's largest and most dynamic industries. It encompasses the research, development, production, distribution and marketing of medicines for human and animal consumption. The growth of this industry is fuelled by the increasing demand for medicines due to demographic growth, an ageing population and the emergence of new diseases.

INDUSTRY LEADER:
Pfizer, ABBVIE, Roche, Johnson & Johnson, Merck & Co. and Novo Nordisk.

INDUSTRY KEY NUMBERS:
Total sales: $1,291B
Growth: 6.8%
Market share: North America (47.2%), Europe (24.5%) China (9.7%)

COMPANY

Pfizer

COMPANY:
Pfizer is a global pharmaceutical corporation with a rich history dating back to its founding in 1849. The company is a prominent player in the pharmaceutical industry, known for its substantial contributions to healthcare and research. Pfizer is celebrated for its pioneering drugs, including vaccines and therapeutics, which have significantly impacted global health.

COMPANY KEY NUMBERS(2022):
Total revenue: $34.729M
Workforce: 80 000
Market share: 9 %
Beta: 0.57
PER: 9,37

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 8.02
Return on Equity TTM: 31.74%
Gross Margin TTM: 69.03%
Total Debt to Equity MRQ: 108.47%
Price to Book MRQ: 7.29

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 7.91
Return on Equity TTM: 23.08%
Gross Margin TTM: 69.82%%
Total Debt to Equity MRQ: 66.32%
Price to Book MRQ: 1.72

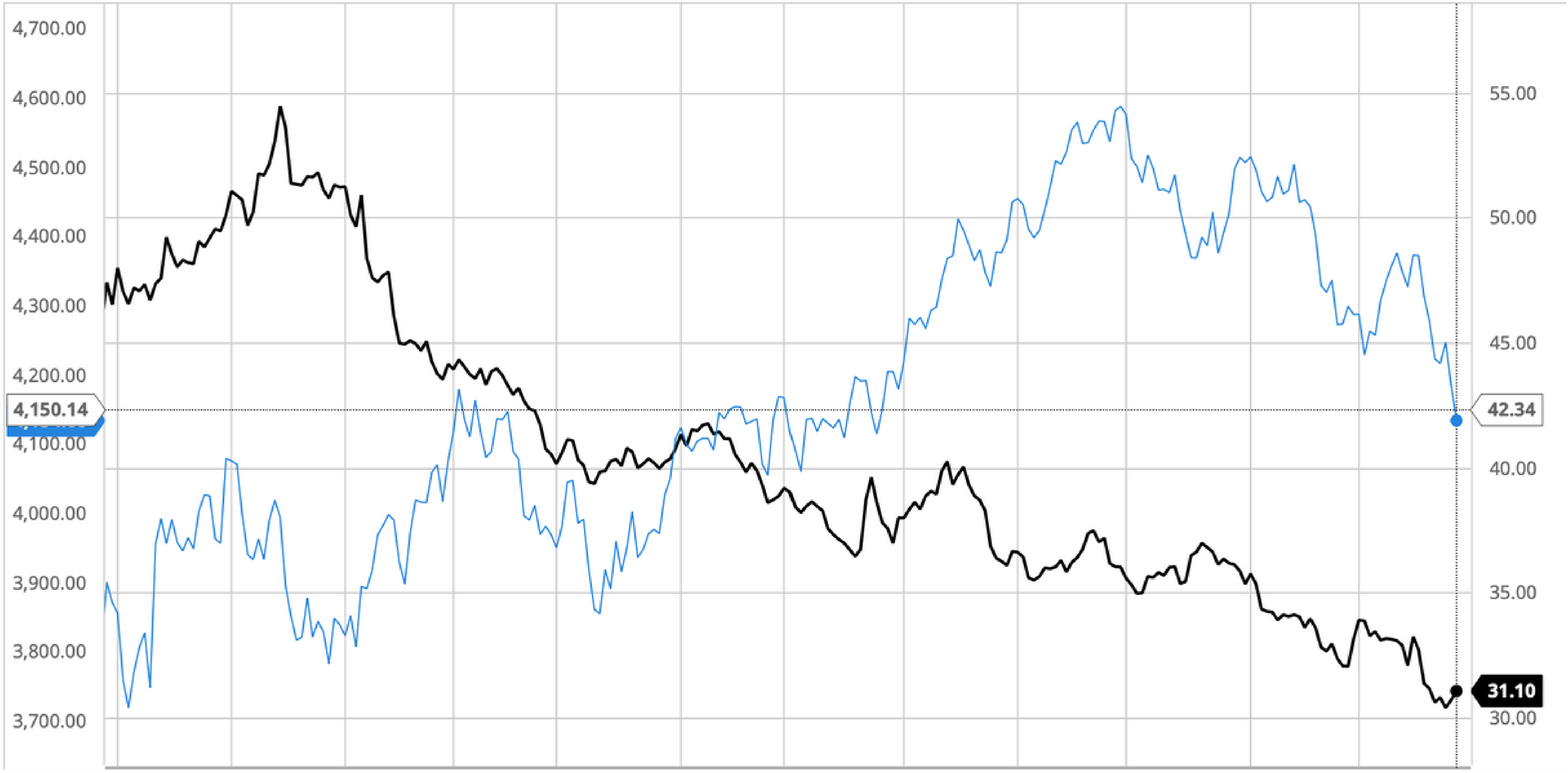
Pfizer P/E ratio is lower than the industry average. This could indicate that Pfizer company could be under valued compared to the others company in this same industry as represent the consequente inferior figure of the price to book. Therefore it represents a great opportunity for investors as a greater gorss margin .However, Pfizer performs less consequently than the rest of the industry as shows the return on equity (23.08% <31.74%).

Based on these ratios, Pfizer appears to perform under the industry average in terms of return on equity and valuation. However, this company seems to be undervalued due to a higher gross margin and its lower total debt to equity that represent a healthy company that balances correctly its income and expense and so a great opportunity for investors.

PRICE HISTORY

ONE YEAR PERFORMANCE:

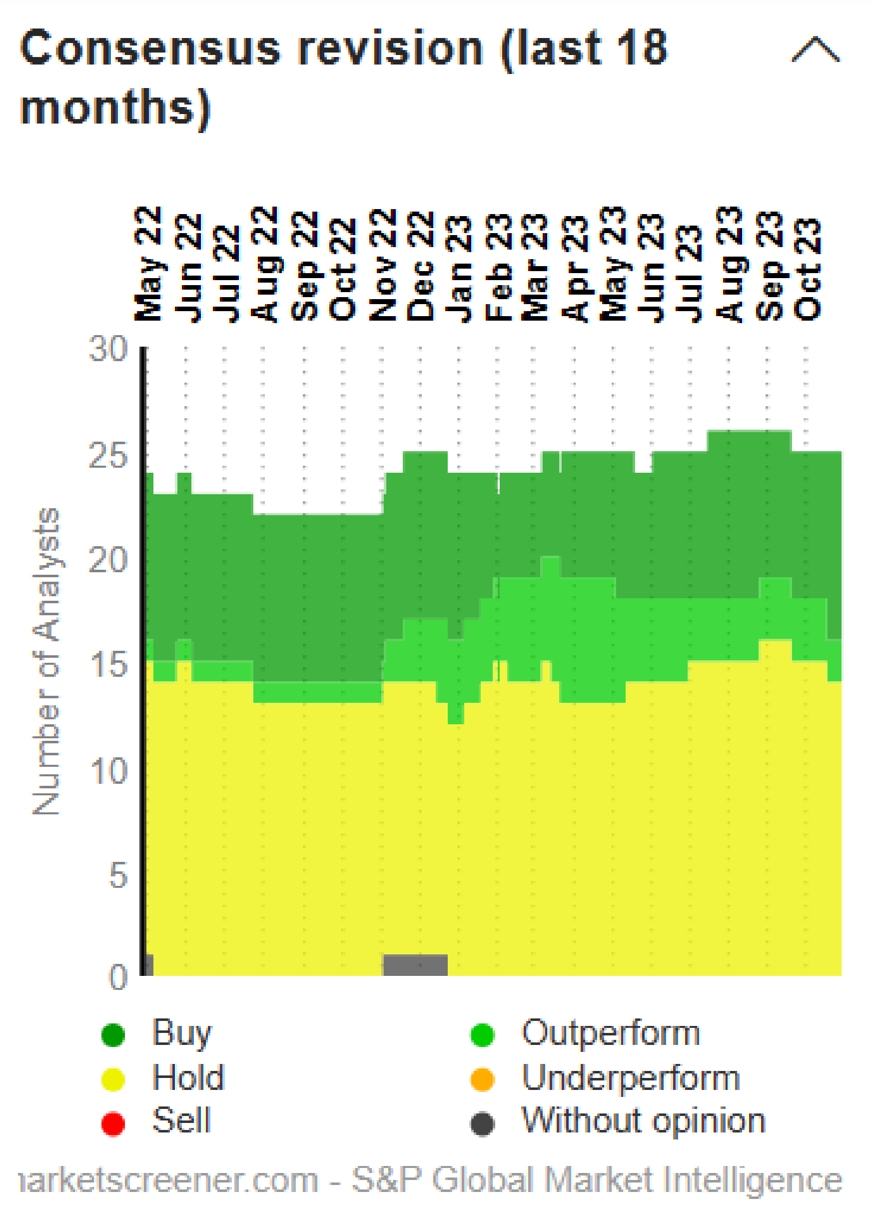
SP500 (blue line): 9.30%
Pfizer (black line): - 32.47%

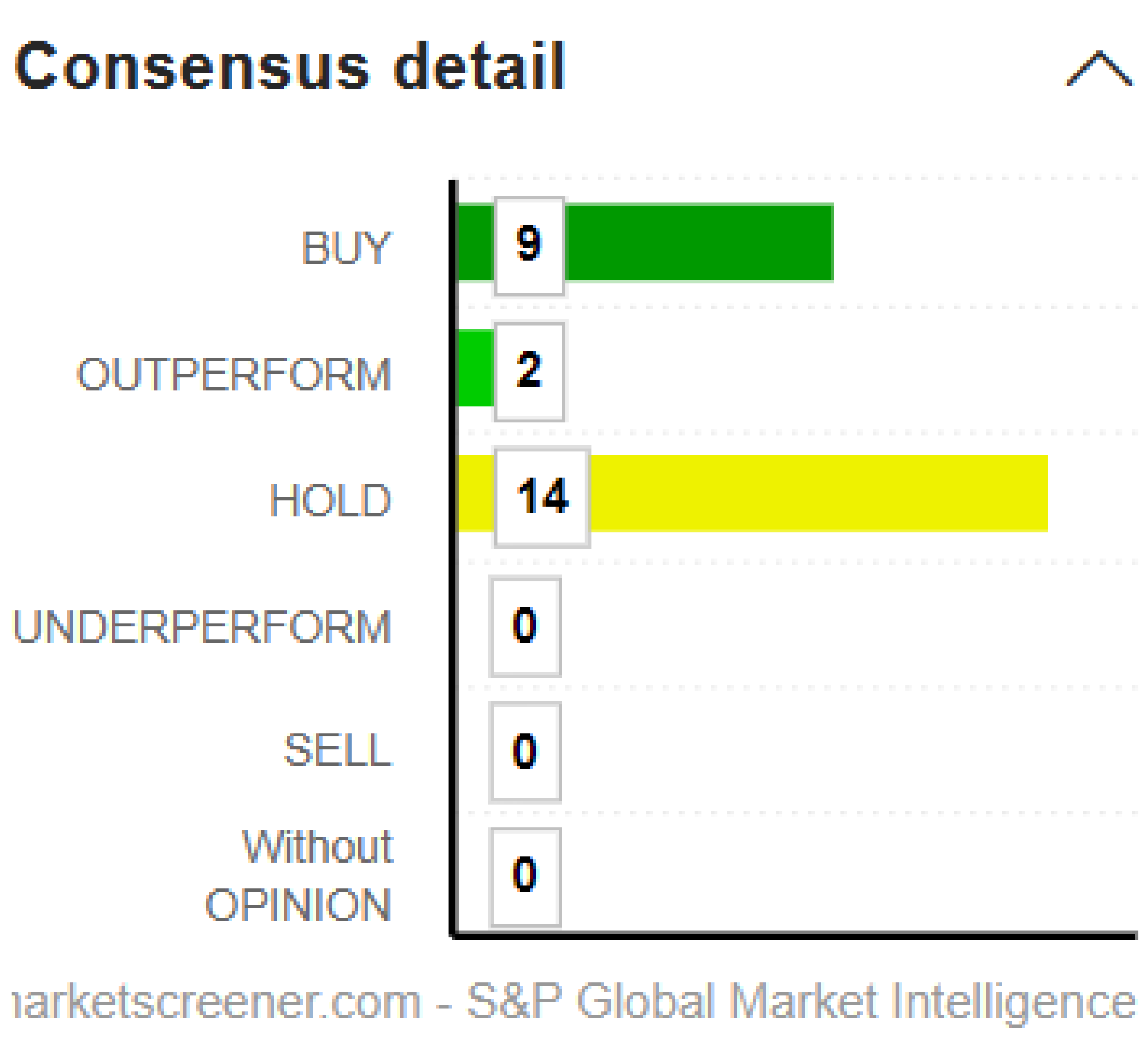


Pfizer has seen a substantial decline of -32.47% over the last year, while the S&P 500 index has only increased by 9.30%. The negative performance of Pfizer can be attributed to various factors, such as increased competition in the pharmaceutical industry, company-specific events, or product pipeline issues.

Pfizer has a beta of 0.57, indicating lower relative volatility compared to the market. However, despite this lower beta, Pfizer's performance has been negative over the past year, suggesting that other factors have also influenced the company's stock performance.

ANALYST RECOMMENDATIONS





To understand how the recommendation rate is calculated, we will use the weighted average method. We'll give each category a value that will increase its weight in the final calculation.

Buy: 1, Outperform: 2, Hold: 3 Underperform: 4 Sell: 5

We will then count the number of analyst opinions by multiplying them by their weight.

Buy signal = 9, Outperform = 4 Hold = 42, Underperform = 0, Sell = 0

We then add up all the products = 55 ÷ 25 = 2.2

Analyst recommendations for the Pfizer company reveals a strong consensus of Hold since May 2022 as we can see below. The hold increased and get stabilized from January 2023 to now. Plus, there more fluctuation of buying recommendation with more like in December 2022, April to October 2023. However, the most recommendated is the hold.

This move can be related to the actual situation with uncertainty based on the pandemic that raised preocupation to medical and pharmaceutical area operations/ expenses and investors minds.

HOT NEWS

ARTICLE

Published Oct 27, 2023 03:43PM ET Updated Oct 27, 2023 04:21PM ET

Health officials have confirmed that even once the U.S. government begins to transfer its distribution to the commercial market next month, the majority of individuals will still have access to Pfizer's Paxlovid and Merck's Lagevrio COVID-19 oral antiviral medications for little or no cost. Along with vaccinations and diagnostics, the government has been in charge of distributing the therapies; nevertheless, it has moved that work to conventional commercial channels.

On November 1, commercial ordering for the treatments is scheduled to begin. The most widely prescribed COVID-19 treatment for at-home use in the United States, Paxlovid, was made free of charge by the government of the United States, which spent about $530 each course for it. Before providing insurance companies and pharmacies with rebates and other concessions, Pfizer set the price of Paxlovid at about $1,400 per course benefit supervisors are considered. Providers are being encouraged by the government to keep giving away the federally owned supply at no cost until it runs out or expires.

CONCLUSION :

According to tis article, the product of Pfizer are still on track for a new commercialization in USA for COVID treatment.
Therefore, it confirms that the consideration of covid in pharmaceutical industry is still a big thing and present opportunities for Pfizer activity.

STRATEGY

WHY HAVE YOU CHOSEN THIS OPTION STRATEGY?

Our decision to invest $10,000 in Pfizer was based on a comprehensive analysis of financial data and current market trends. We considered several key factors:

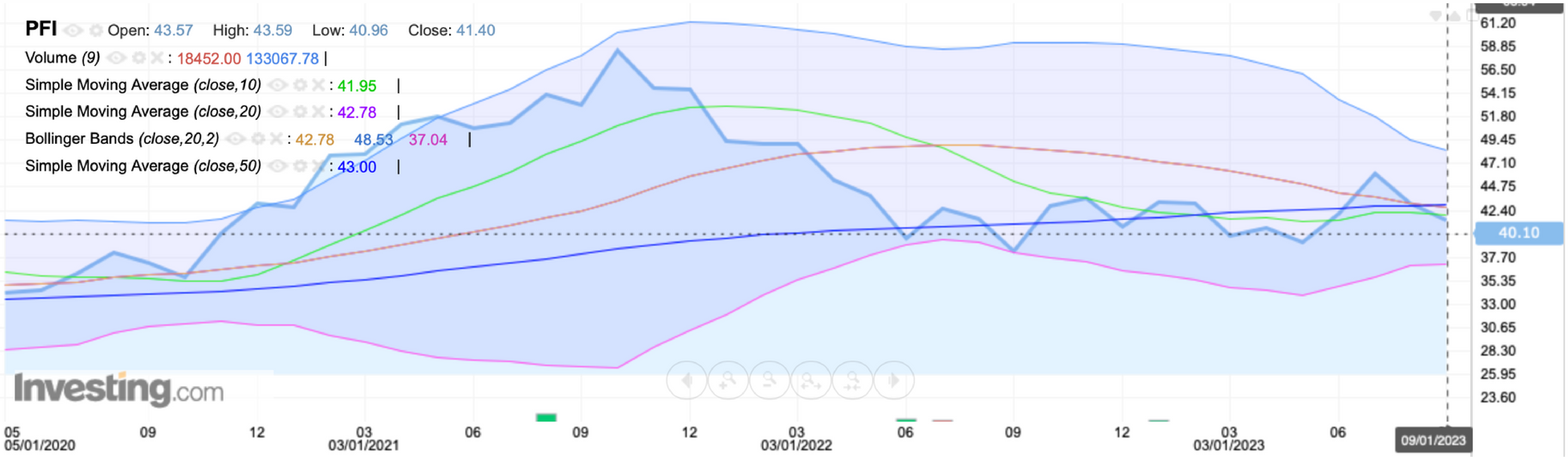
- **SECTOR:** Pfizer operates in the pharmaceutical industry, which traditionally experiences strong and steady demand. Factors contributing to this demand include demographic growth, an aging global population, and the emergence of new diseases. However, in the case of Pfizer, the company faces unique challenges, such as patent expirations on some of its key drugs. These factors introduce a degree of uncertainty into Pfizer's future prospects.

- **Financial performance:** Pfizer's financial performance has some distinct characteristics. The company's Price-to-Earnings (P/E) and Price-to-Sales (P/S) ratios are above the industry average. While this may reflect investor confidence in the company's future earnings, it also indicates high expectations. Additionally, a significantly above-average P/E ratio suggests that Pfizer's assets are valued more favorably than those of some of its competitors. However, it's essential to consider that these ratios should be interpreted cautiously, as they can change quickly in response to market dynamics.

Indicator: Current technical indicators for Pfizer are largely bearish in the short, medium, and long term. Most indicators are advising a "SELL," with many displaying moderate to strong strength. Despite occasional variations, the overall trend is leaning toward the negative side.

IIn conclusion, our decision to consider a put option for Pfizer is rooted in a comprehensive analysis of the company's financial data and prevailing market conditions. While the pharmaceutical industry generally exhibits strong demand, Pfizer's specific challenges, combined with its financial ratios and current technical indicators, contribute to our cautious outlook. We will closely monitor the company's performance in 2023 to validate our investment strategy.

MOVING AVERAGE AND BOLLINGER BANDS



MOVING AVERAGES :

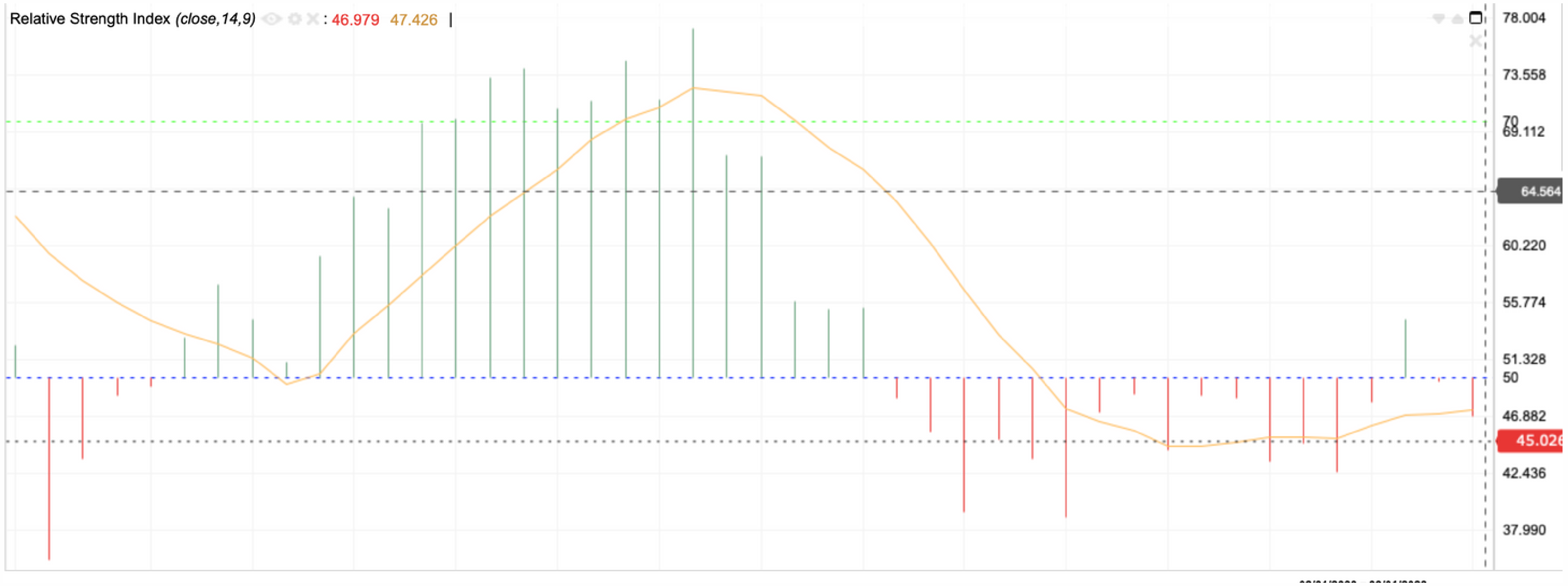
- **MA10**: The MA10 is currently at **41.95**, which is above the current share price of **40.10**. This suggests short-term bearish momentum, as the stock price is trading below the 10-day moving average.
- **MA20**: The MA20 is at **42.78**, which is above the current share price of **40.10**. Similar to the MA10, this indicates short-term bearish momentum, as the stock price is trading below the 20-day moving average.
- **MA50**: The MA50 is at **43.00**, which is above both the MA10, MA20, and the current share price of **40.10**. This positioning suggests a potential short-to-medium-term support level, as the stock price is currently below the 50-day moving average but not too far below. This could indicate a level of price support

BOLLINGER BANDS :

- **Upper band**: Currently at 48.53, it's well below the stock's current price of 40.10, suggesting the stock is not in an overbought condition.
- **Median Band**: At 42.78, it aligns closely with the 20-day moving average (MA20), indicating a possible short-term bearish trend.
- **Lower band**: Positioned at 37.04, if the stock approaches this level, it may signal an oversold condition and the potential for a price rebound.

The share's current value, at 40.10, falls between the MA10 and MA50, indicating a balance of forces between buyers and sellers. However, it's important to note that the stock is closer to the median of the Bollinger Bands, which stands at 42.78. This proximity to the median suggests the potential for a short-term upward movement.
Caution is advised, as the price is also close to the MA10, which is at 41.95. This proximity to the MA10 indicates possible bearish pressure, potentially restraining the stock's immediate upward movement. The stock's current position suggests a balanced and cautious outlook, with short-term upward potential tempered by nearby resistance levels.

RSI

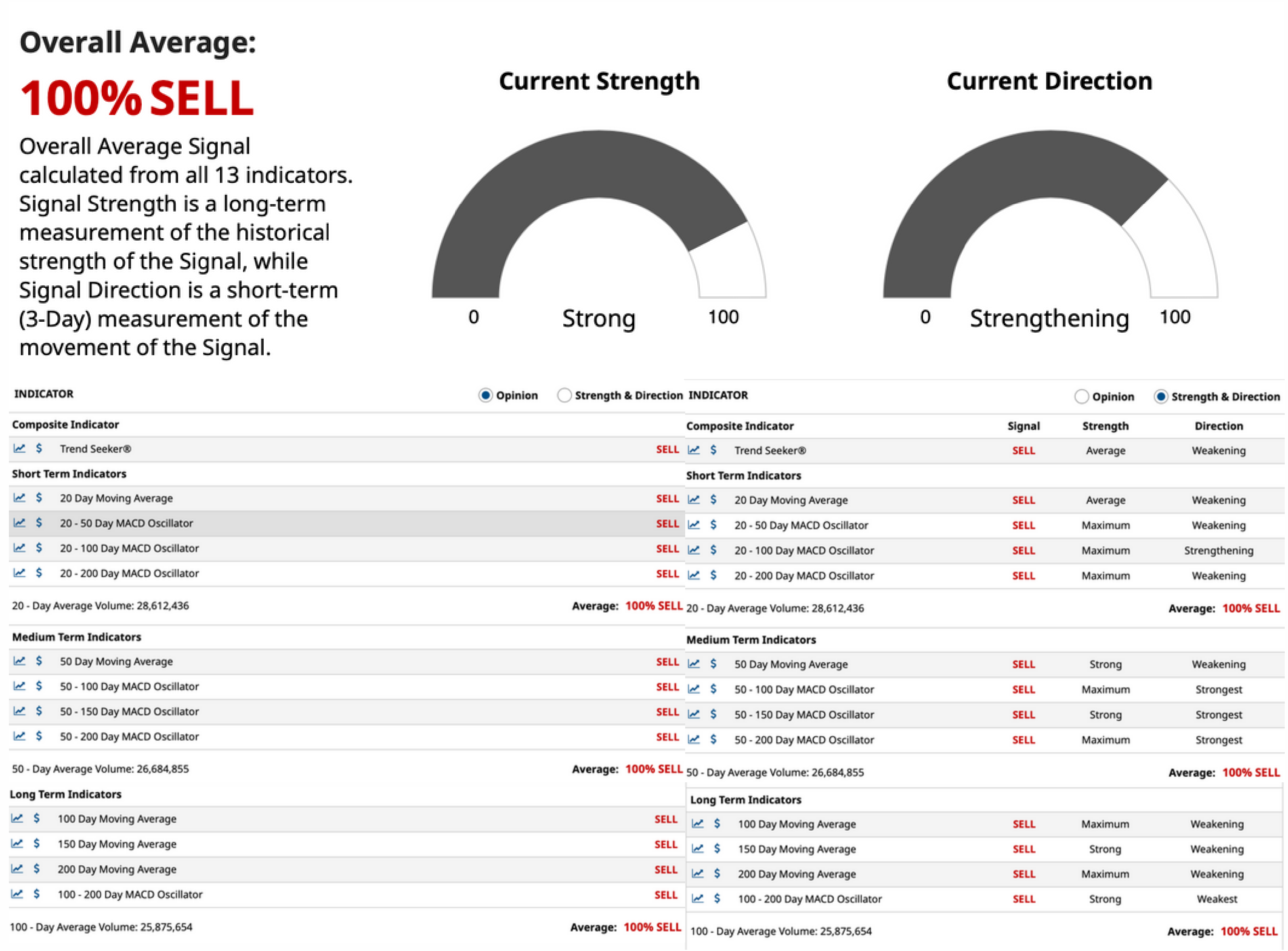


The Relative Strength Index (RSI) is a vital technical indicator that measures the velocity and direction of price movements, helping identify potential overbought or oversold conditions. An RSI value above 70 typically indicates an asset is overbought, suggesting a possible reversal to the downside. Conversely, an RSI below 30 signals an oversold condition, indicating the potential for an upward reversal.

As of the most recent data on October 25, 2023, Pfizer's RSI stands at 46.979. This value falls within the neutral zone, between the traditional overbought threshold of 70 and the oversold threshold of 30. Furthermore, it hovers just above the 50 threshold, indicating a mild upward trend.
Pfizer's RSI value of 46.979 suggests that the stock's momentum is in a balanced state, neither excessively strong nor weak, with a slight tilt towards the bullish side. Examining the historical performance, Pfizer's RSI has exhibited fluctuations over recent months, briefly touching the overbought level in August before dipping below the 50 threshold, signaling bearish pressure. In more recent data, the RSI has begun to climb, pointing towards renewed bullish momentum.
Considering the RSI value, Moving Averages (MA), and Bollinger Bands (BBands) for Pfizer, it appears the stock is positioning for a potential short-term bullish recovery. The RSI's proximity to the oversold zone suggests the stock may be undervalued and ripe for a rally. Additionally, the stock's alignment with the MAs indicates it's in a consolidation phase following a potential decline, and the BBands show proximity to the support level.

When we combine these elements, it is likely that Pfizer shares may experience an upward movement in the short term, as historical patterns and the RSI suggest renewed bullish sentiment. However, it's essential to consider additional factors, such as fundamental analysis and market conditions, to make well-informed investment decisions.

BARCHART OPINION



Overall Average:

100% SELL

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.

INDICATOR — Opinion / Strength & Direction

Indicator	Opinion
Composite Indicator	
Trend Seeker®	SELL
Short Term Indicators	
20 Day Moving Average	SELL
20 - 50 Day MACD Oscillator	SELL
20 - 100 Day MACD Oscillator	SELL
20 - 200 Day MACD Oscillator	SELL
20 - Day Average Volume: 28,612,436	Average: 100% SELL
Medium Term Indicators	
50 Day Moving Average	SELL
50 - 100 Day MACD Oscillator	SELL
50 - 150 Day MACD Oscillator	SELL
50 - 200 Day MACD Oscillator	SELL
50 - Day Average Volume: 26,684,855	Average: 100% SELL
Long Term Indicators	
100 Day Moving Average	SELL
150 Day Moving Average	SELL
200 Day Moving Average	SELL
100 - 200 Day MACD Oscillator	SELL
100 - Day Average Volume: 25,875,654	Average: 100% SELL

Composite Indicator	Signal	Strength	Direction
Trend Seeker®	SELL	Average	Weakening
Short Term Indicators			
20 Day Moving Average	SELL	Average	Weakening
20 - 50 Day MACD Oscillator	SELL	Maximum	Weakening
20 - 100 Day MACD Oscillator	SELL	Maximum	Strengthening
20 - 200 Day MACD Oscillator	SELL	Maximum	Weakening
20 - Day Average Volume: 28,612,436			Average: 100% SELL
Medium Term Indicators			
50 Day Moving Average	SELL	Strong	Weakening
50 - 100 Day MACD Oscillator	SELL	Maximum	Strongest
50 - 150 Day MACD Oscillator	SELL	Strong	Strongest
50 - 200 Day MACD Oscillator	SELL	Maximum	Strongest
50 - Day Average Volume: 26,684,855			Average: 100% SELL
Long Term Indicators			
100 Day Moving Average	SELL	Maximum	Weakening
150 Day Moving Average	SELL	Strong	Weakening
200 Day Moving Average	SELL	Maximum	Weakening
100 - 200 Day MACD Oscillator	SELL	Strong	Weakest
100 - Day Average Volume: 25,875,654			Average: 100% SELL

Overall average signal: The overall assessment of signal strength across the 13 available indicators unanimously favors a "SELL" position at 100%. This indicates a pronounced bearish sentiment across a variety of technical indicators.

Current strength: The visual representation of the stock's strength reaches its maximum point, suggesting that the historical strength of the signal is robust. This finding reinforces the conviction of a bearish position.

Current direction: The current direction suggests that the signal is "strengthening." In the short term (3-day measurement), the signal's movement is gaining momentum in the bearish direction.

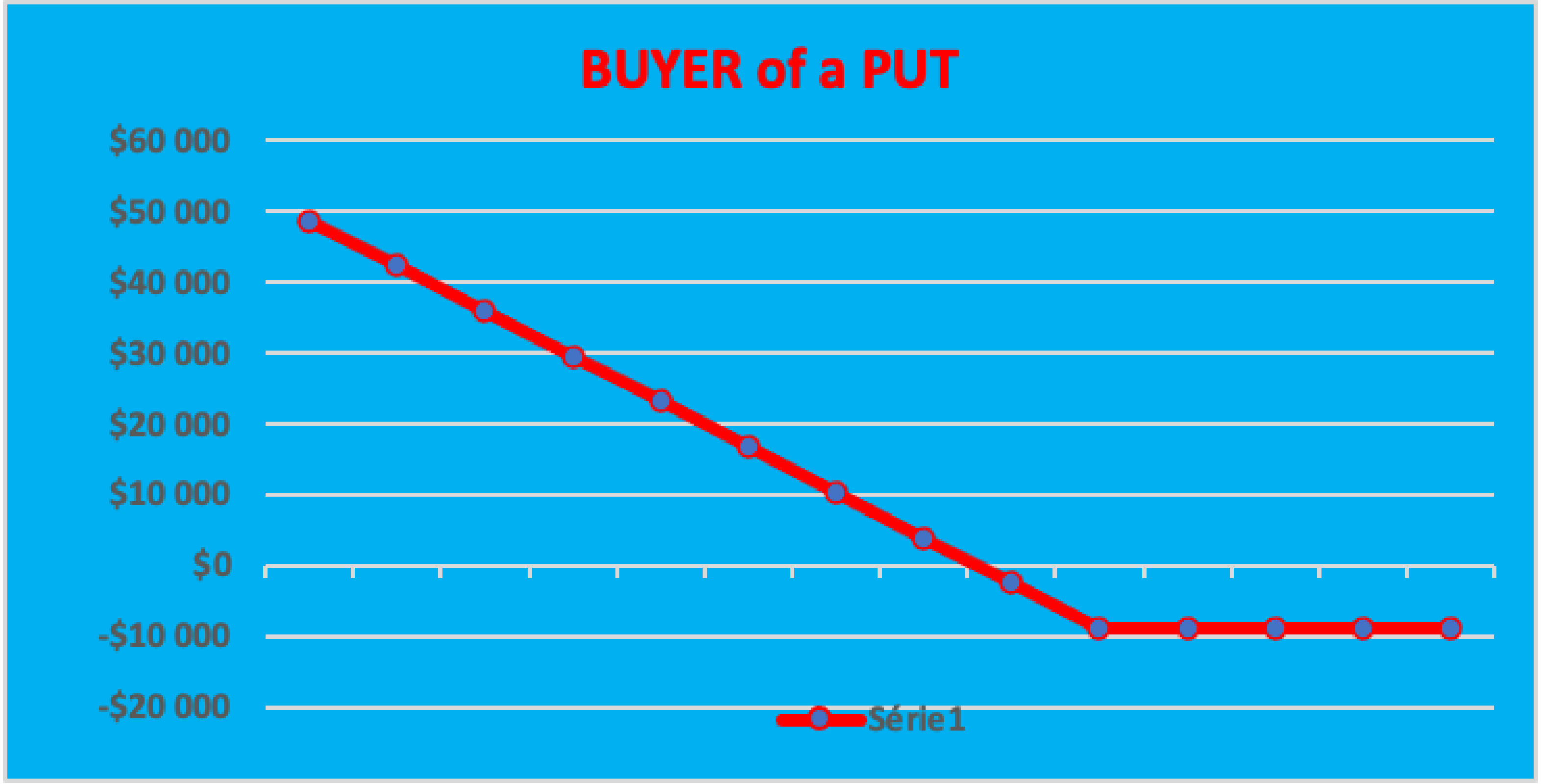
Short-term indicators: All short-term indicators, including the Trend Seeker, moving averages, and MACD oscillators, suggest a "SELL" position. While the strength of some indicators is categorized as "weak," the 100-day and 200-day MACD oscillators show "strong" and "strongest" strengths, respectively. This indicates that despite short-term fluctuations, longer-term indicators are more promising for a bearish trend.

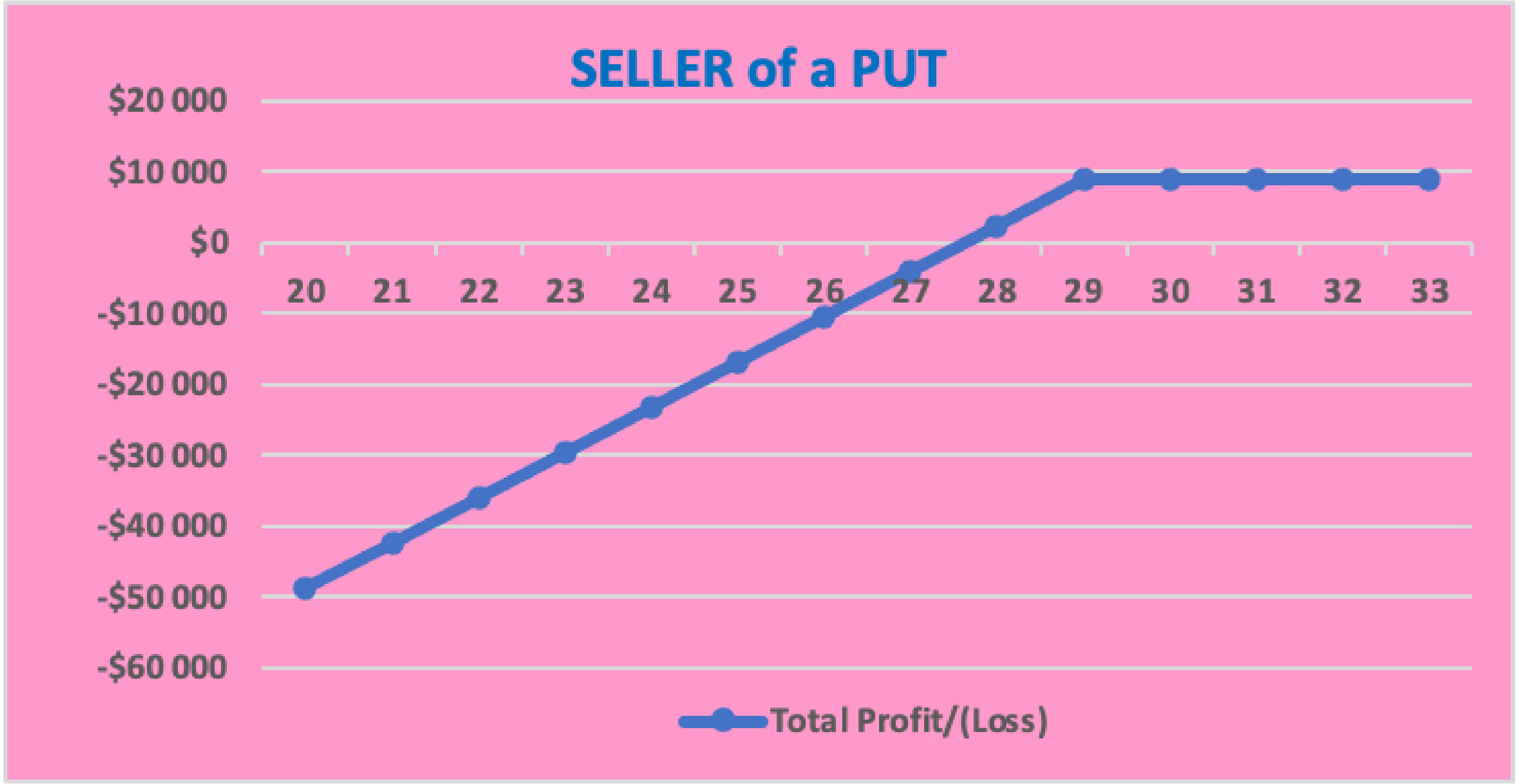
Medium-term indicators: In the medium term, all indicators, including the 50-day moving average and MACD oscillators, suggest a "SELL" position. The strength of the 100-day and 150-day oscillators is at its "maximum," although their direction is "weakest," implying a possible slowdown or consolidation in the medium term.

Long-term indicators: For long-term indicators, the 100-day, 150-day, and 200-day moving averages, as well as the 100-200-day MACD oscillator, all indicate a "SELL" position. The 100-day moving average is categorized as "strong" but with a weakening direction, while the 100-200-day MACD oscillator is "strong" and shows the "strongest" direction, indicating a strong bearish trend.

Taking all these elements into consideration, the overall analysis suggests strong bearish sentiment for Pfizer across short-, medium-, and long-term indicators. Most indicators point to a "SELL" position, with many displaying strong or maximum strength. While there might be signs of weakening direction for a few indicators, the overall outlook remains largely negative.

OPTION CHART





What if	$20,00	$21,00	$22,00	$23,00	$24,00	$25,00	$26,00	$27,00	$28,00	$29,00	$30,00	$31,00	$32,00	$33,00	$34,00
PUT BUYER=LONG PUT															
Sell	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00	$29,00
Buy	$20,00	$21,00	$22,00	$23,00	$24,00	$25,00	$26,00	$27,00	$28,00	$29,00	$30,00	$31,00	$32,00	$33,00	$34,00
GM	$9,0000	$8,0000	$7,0000	$6,0000	$5,0000	$4,0000	$3,0000	$2,0000	$1,0000	$0,0000	-$1,0000	-$2,0000	-$3,0000	-$4,0000	-$5,0000
GM adj	$9,0000	$8,0000	$7,0000	$6,0000	$5,0000	$4,0000	$3,0000	$2,0000	$1,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000
-OP	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800
Profit/(Loss)	$7,6200	$6,6200	$5,6200	$4,6200	$3,6200	$2,6200	$1,6200	$0,6200	-$0,3800	-$1,3800	-$1,3800	-$1,3800	-$1,3800	-$1,3800	-$1,3800
Total Profit/(Loss)	*$48 768,00*	*$42 368,00*	*$35 968,00*	*$29 568,00*	*$23 168,00*	*$16 768,00*	*$10 368,00*	*$3 968,00*	*-$2 432,00*	*-$8 832,00*	*-$8 832,00*	*-$8 832,00*	*-$8 832,00*	*-$8 832,00*	*-$8 832,00*
What if	$20,000	$21,000	$22,000	$23,000	$24,000	$25,000	$26,000	$27,000	$28,000	$29,000	$30,000	$31,000	$32,000	$33,000	$34,000
PUT SELLER (Writer)=SHORT PUT															
Sell	$20,000	$21,000	$22,000	$23,000	$24,000	$25,000	$26,000	$27,000	$28,000	$29,000	$30,000	$31,000	$32,000	$33,000	$34,000
Buy	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000	$29,000
GM	-$9,0000	-$8,0000	-$7,0000	-$6,0000	-$5,0000	-$4,0000	-$3,0000	-$2,0000	-$1,0000	$0,0000	$1,0000	$2,0000	$3,0000	$4,0000	$5,0000
GM adj	-$9,0000	-$8,0000	-$7,0000	-$6,0000	-$5,0000	-$4,0000	-$3,0000	-$2,0000	-$1,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000	$0,0000
+OP	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800
Profit/(Loss)	-$7,6200	-$6,6200	-$5,6200	-$4,6200	-$3,6200	-$2,6200	-$1,6200	-$0,6200	$0,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800	$1,3800
Total Profit/(Loss)	-$48 768,00	-$42 368,00	-$35 968,00	-$29 568,00	-$23 168,00	-$16 768,00	-$10 368,00	-$3 968,00	$2 432,00	$8 832,00	$8 832,00	$8 832,00	$8 832,00	$8 832,00	$8 832,00

CALCULATIONS

BREAKEVEN

to calculate the breakeven point, we need to add the strike price to the option price. In our case, $29-$1,38. This gives us $27,62.

NUMBER OF CONTRACTS

Our maximum purchase amount is $10,000. So to find out the total number of contracts we can buy, we do investment amount/(option price*number of contract): 64. So we can buy 64 Pfizer call option contracts.

Pfizer	Call	Put	Contract	
Strike Price	$29,0000	$29,0000	100	shares
Option Price	$1,3800	$1,3800		
Breakeven	$30,3800	$27,6200		
Number of Contracts	72	64		

NO CHANGE IN STOCK PRICE

Stock Market performance: 0%
ROI: 0%

Option performance: -$9,866
ROI: -100%

STOCK PRICE RAISE BY $10

Stock Market performance: -$3,006
ROI: -30%

Option performance: -$9,866
ROI: -100%

STOCK PRICE FALL BY $10

Stock Market performance: $947
ROI: 9%

Option performance: $48,768
ROI: 488%

STOCKTRAK CONFIRMATION

PFE

LAST PRICESS	DAY'S CHANGE	BID/ASK
30.89	-0.27	30.88/30.89
DAY'S RANGE	**DAY'S VOLUME**	
30.87 - 31.13	1,098,032	

Buy | **Sell To Open** | **Buy To Close** | **Sell**

CALL / PUT	EXPIRY	STRIKE (show all)
Put	12/15/2023	31

64 CONTRACTS

ORDER TYPE	LIMIT/STOP PRICE	DURATION
Market	$0.00	Good for Day

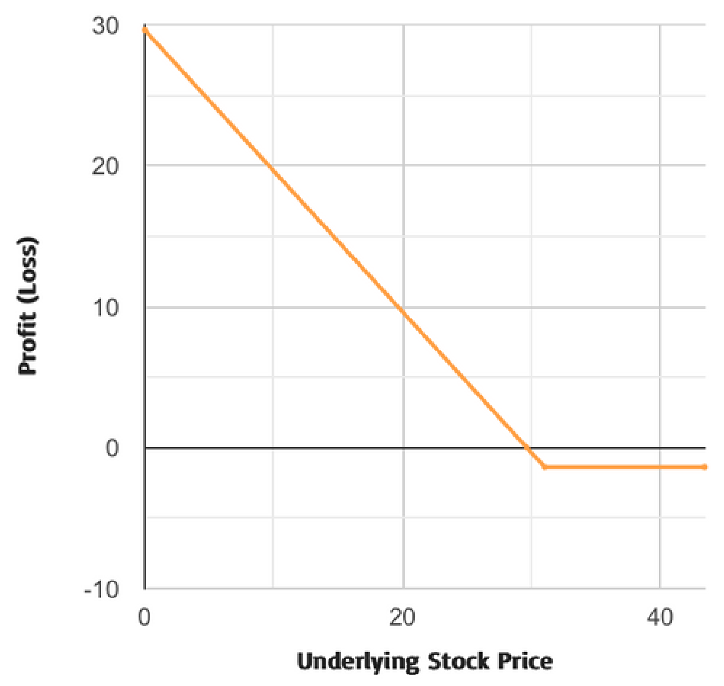
Estimated Order Total
$9,866.00

Review Order

Option Details For PFE2315X31

Last Price	1.38
Day's Change	0
Bid/Ask	1.54 / 1.58
Day's Range	1.37 - 1.53
Day's Volume	309

Option Payout Diagram



OPTION 4
PROTECTIVE PUT AMAZON

Hugo Moissonnier

OPTION SYMBOL

Option Details For AMZN2315X120

CORRECT SYMBOL AMZN121523P00120000

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is AMZN.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd) so on the 15th of December 2023.
- In our case, the expiration date shoud be represented as followed: 121523

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a put so it should be represented as P

STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $120 so it should be represented as 00120000

OPTION SYMBOL

Option Details For AMZN2315X120

CORRECT SYMBOL AMZN12152300120000

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is AMZN.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd) so on the 15th of December 2023.
- In our case, the expiration date shoud be represented as followed: 121523

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a put so it should be represented as P

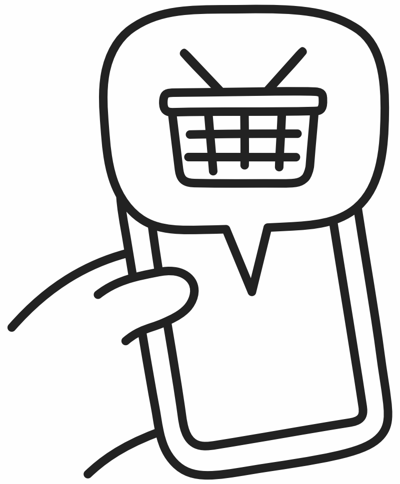
STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $120 so it should be represented as 00120000

FUNDAMENTAL ANALYSIS

INDUSTRY



INDUSTRY:
The online retail, also call e-commerce, is the digital marketplace for consumer products. It offers convenience, a wide product selection, fast shipping, and various payment options. E-commerce has transformed the way we shop, breaking down geographical barriers and becoming an integral part of the modern consumer experience.

INDUSTRY LEADER:
Amazon, Alibaba, Walmart, and eBay

INDUSTRY KEY NUMBERS:
Total sales: $5,436B
Growth: 10% in a year

COMPANY

amazon

COMPANY:
Amazon is a multinational tech and e-commerce giant founded in 1994. It's famous for its extensive online retail platform, Amazon Prime fast shipping, and hardware like the Kindle and Echo. Amazon is also a cloud computing leader through Amazon Web Services (AWS) and has a presence in entertainment with Amazon Studios. Its global influence spans across multiple industries.

COMPANY KEY NUMBERS:
Total revenue in 2022: $513.983B
Workforce: more than 1.54 millions
Market share: 37.8%
Beta: 1.188
PER: 62.28

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 77.84
Return on Equity TTM: 15.26%
Gross Margin TTM: 36.75%
Total Debt to Equity MRQ: 96,79%
Price to Book MRQ:8.18

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 65.72
Return on Equity TTM: 12.53%
Gross Margin TTM: 46.24%
Total Debt to Equity MRQ: 74.87%
Price to Book MRQ:7.21

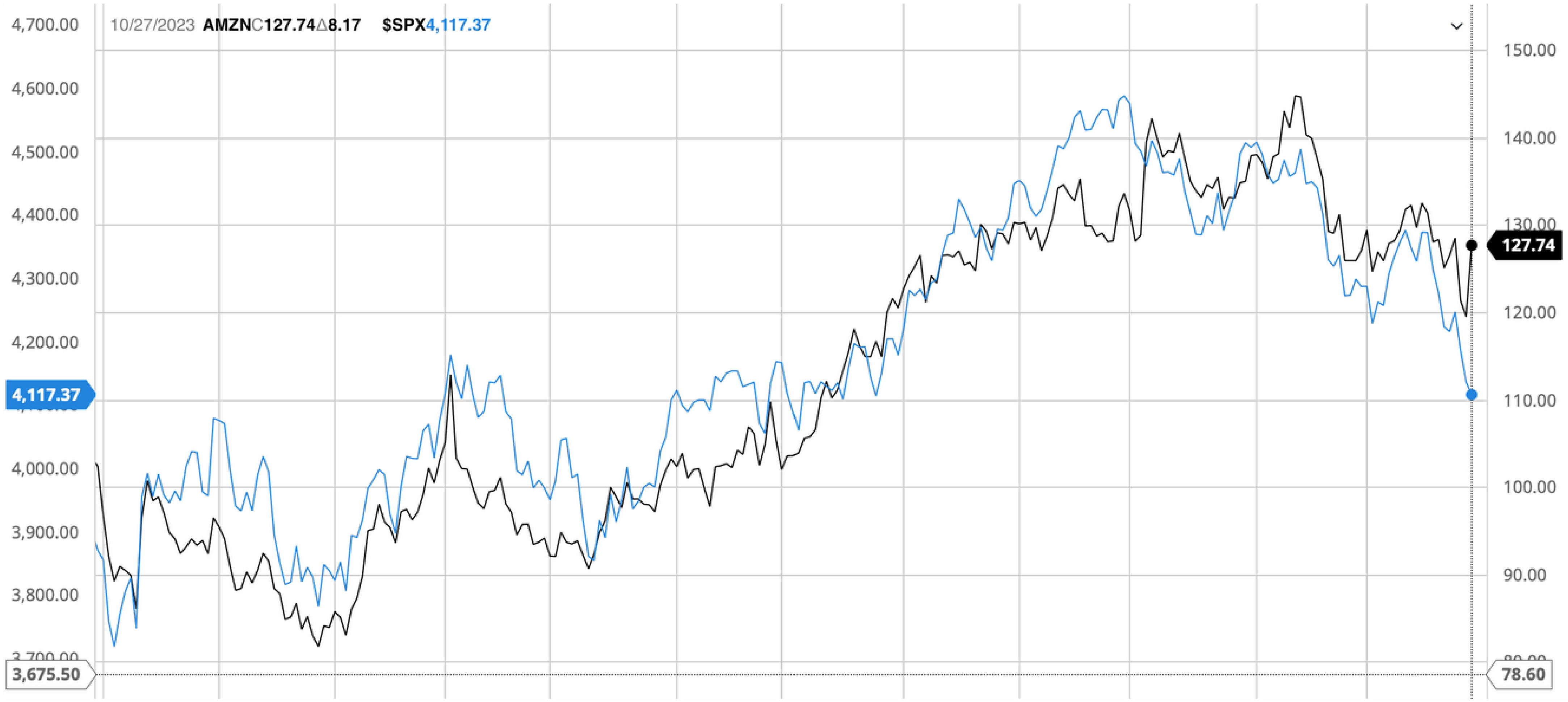
Amazon's financial performance, when compared to industry averages, presents a mixed picture. The company's P/E ratio of 65.72 is below the industry average of 77.84, suggesting a potential undervaluation. While its Return on Equity (ROE) of 12.53% is slightly below the industry norm of 15.26%, Amazon maintains a higher Gross Margin at 46.24% compared to the industry's 36.75%. Furthermore, Amazon demonstrates a more conservative approach to debt with a Total Debt to Equity ratio of 74.87%, notably lower than the industry average of 96.79%. Lastly, its Price to Book ratio of 7.21 is also below the industry mark of 8.18, suggesting that its assets are more affordably valued. Overall, Amazon exhibits a sound financial position with certain metrics indicating more favorable financial management and asset valuation than its industry counterparts.

In conclusion, Amazon's financial indicators, when juxtaposed against industry benchmarks, reveal a company that prudently manages its assets and finances. Despite certain metrics like the ROE falling slightly short of industry standards, the company shines in areas like Gross Margin and a conservative debt strategy. The comparatively lower P/E and Price to Book ratios further emphasize the potential attractiveness of Amazon's valuation. All these factors, taken together, suggest that Amazon stands on a solid financial footing, striking a balance between growth, value, and risk management in a competitive industry landscape.

PRICE HISTORY

ONE YEAR PERFORMANCE:

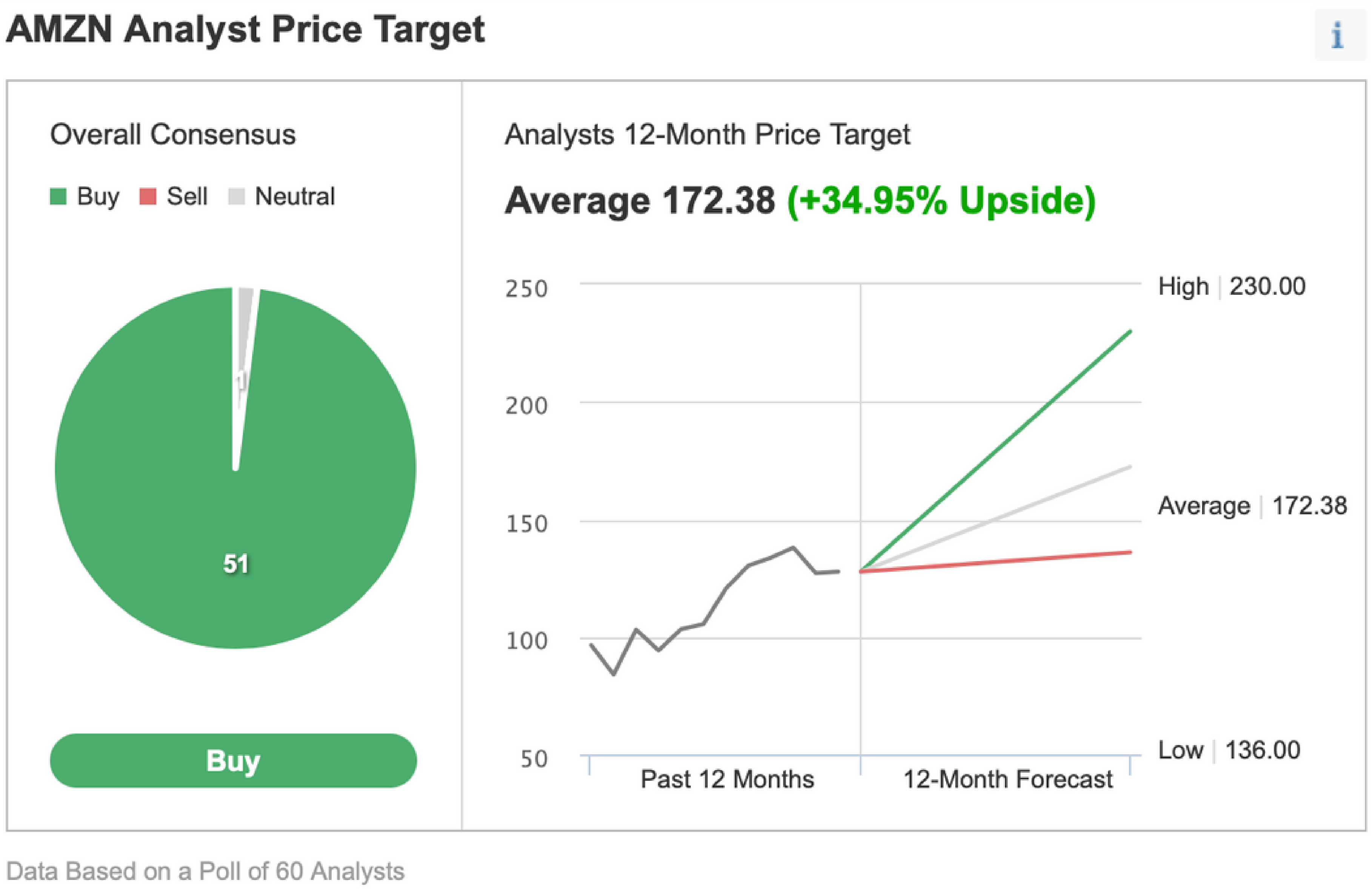
SP500 (blue line): 6.34%
AMAZON (black line): 24.71%



Over the past year, Amazon's stock performance has significantly outpaced the S&P 500 index. As depicted in the chart, Amazon has witnessed a remarkable increase of 24.71%, while the S&P 500 index saw a more modest 6.34% rise. This exceptional outperformance by Amazon can be attributed to several factors, including strong financial results, positive company announcements, and advancements in its product and service portfolio.

Amazon has shown strong performance this year, with a remarkable increase of 24.71% in its stock value. In comparison, the S&P 500 index (SP500) has seen a more modest 6.34% rise. Amazon's beta, which stands at 1.188, indicates that the company's stock is moderately more volatile than the market. While it hasn't exhibited the same level of volatility as Nvidia (as mentioned earlier), this higher sensitivity to market movements might help explain Amazon's significant growth this year. Investors looking for potential higher returns may have been attracted to Amazon's stock due to its ability to outperform the market during favorable conditions while still bearing some elevated risk during market downturns.

OVERALL CONSENSUS / TARGET PRICE



ANALYST ESTIMATES

A total of 60 analysts have provided a range of estimates for Amazon's target price over the upcoming period. These projections exhibit a significant variance, which may reflect uncertainty or differing opinions regarding the company's future performance.

MEDIAN ESTIMATE

The median estimate stands at $172.38. This implies a potential increase of 34.78% from the current price of $127.74. The median estimate suggests that a majority of analysts hold a moderately optimistic outlook for Amazon's growth in the foreseeable future.

HIGH AND LOW ESTIMATES

The highest estimate places the target price at $230.00, signaling a potential increase of 79.89% over the current price. This indicates that certain analysts are notably bullish on Amazon's potential. Conversely, the lowest estimate is $136.00, representing a substantial 6.34% decrease from the current price. This reflects a more cautious or pessimistic viewpoint held by a minority of analysts.

SUMMARY

Upon reviewing these forecasts, it becomes evident that, while there is a prevailing sense of moderate optimism among the majority of analysts, there also exists a notable level of uncertainty surrounding Amazon's future prospects.

HOT NEWS

ARTICLE

Amazon announced financial results for the third quarter that exceeded market expectations. Although cloud (AWS) revenues fell slightly short of forecasts, Amazon's stock rose after-hours on Wall Street. The company's quarterly revenue increased by 13% to $143.1 billion, surpassing the consensus of $141.4 billion. Quarterly net profit saw a significant increase, rising from $2.9 billion the previous year to $9.9 billion, largely due to cost-cutting measures, including workforce reductions. The operating margin also exceeded expectations, reaching 7.8% compared to a forecast of 5.5%.

Amazon highlighted the success of its Prime Day promotional event and expressed optimism about the growth of its artificial intelligence (AI) business, particularly through Amazon Web Services (AWS). Amazon CEO Andy Jassy stated that AI represents a multi-billion-dollar opportunity for AWS, which launched Bedrock AI, a service aimed at streamlining the development of large language models. Amazon also recently invested $1.25 billion in Anthropic, a competitor of Open AI, with the aim of making its tools available to cloud customers. Looking ahead to the next quarter, Amazon expects revenues to be in the range of $160 to $167 billion, slightly below the consensus of $166.6 billion.

Regarding AWS, quarterly sales increased by 12% year-over-year, and the division's operating profit also rose by 29% to $7 billion. AWS showed slightly higher growth than in the previous quarter and exceeded the consensus for operating profit by $1.3 billion.

CONCLUSION :

In summary, Amazon's Q3 results exceeded expectations, driven by strong revenue growth and increased profits. Despite a minor setback in cloud revenue, Amazon's future looks promising, especially with its focus on AI through Amazon Web Services. Overall, Amazon remains a formidable force in e-commerce and cloud computing with a bright outlook.

STRATEGY

WHY HAVE YOU CHOSEN THIS OPTION STRATEGY?

Our decision to purchase a protective put option for our $25,000 long position in Amazon is based on a thorough analysis aimed at securing our investment. Here are the strategic reasons for this choice:

- **SECTOR:** Amazon is a dominant player in e-commerce and cloud computing, sectors that are constantly growing. However, market volatility and increased competition make it prudent to protect our investment.

- **FINANCIAL PERFORMANCE:** Amazon shows sustained revenue growth and continuous expansion of its services. However, financial ratios such as P/E can be high, reflecting optimistic market expectations and justifying a hedging strategy to manage risks.

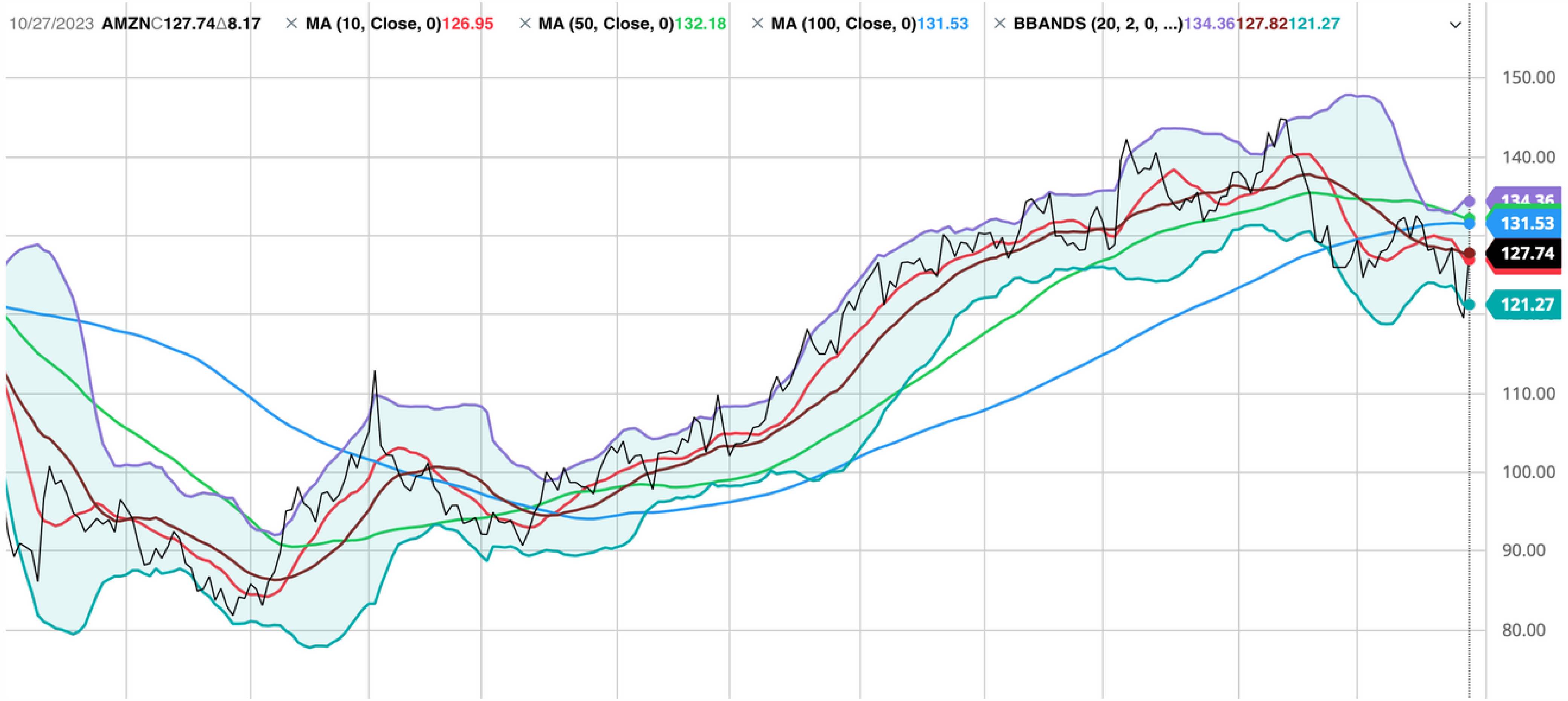
- **INDICATORS:** While long-term indicators remain positive, short-term fluctuations can negatively impact the value of our investment. Purchasing a protective put allows us to limit potential losses without forgoing future gains if the stock continues to rise.

- **STRATEGY:** The protective put acts as insurance, enabling us to set a floor for our losses while still benefiting from potential upside. This choice demonstrates prudent and strategic risk management in the face of increasing economic uncertainty.

In conclusion, the protective put option for our long position in Amazon is a measure of financial prudence that aligns our investment portfolio with a balanced approach to risk management, as we await the performance of the year 2023.

MOVING AVERAGE AND BOLLINGER BANDS

FOR ONE YEAR



MOVING AVERAGES (MA):

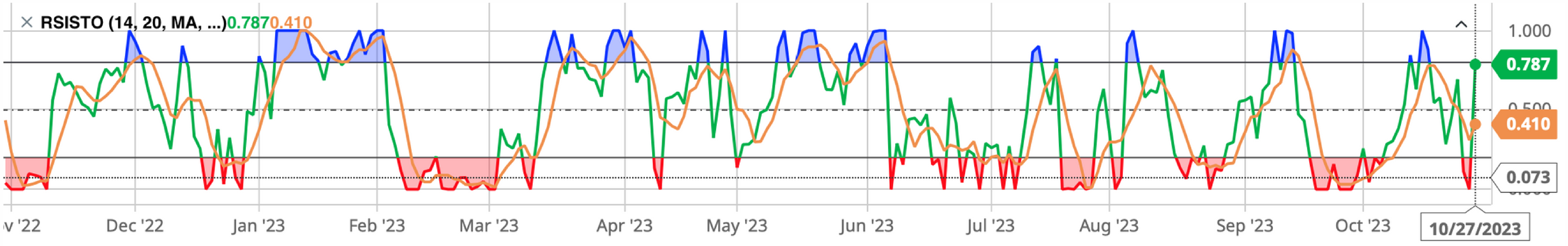
- **MA10**: At **126.95**, it is above the current share price of **127.74**, suggesting short-term bearish momentum.
- **MA50**: At **132.18**, is above the current share price. This indicates a medium-term bullish trend because the 50-day moving average is above the current price. It may suggest a medium-term upward trend.
- **MA100**: Positioned at **131.53**, which is also higher than the current share price. This suggests a medium-term bullish trend and indicates potential for further upward movement over an extended period.

BOLLINGER BANDS (BBANDS):

- **Upper Band (134.36)**: Suggests a potentially overbought level. The current price (127.74) offers room for upside potential, but caution is advised near 134.36.
- **Median Band (127.82)**: Near the MA50, indicating a short-term trend in line with the average.
- **Lower Band (121.27)**: A value below which the stock might be in an oversold condition. The current price is well above it, but approaching or falling below 121.27 could present a buying opportunity.

In summary, the moving averages indicate a short-term bearish trend and medium to long-term bullish trends. Bollinger Bands suggest short-term upward potential, but caution is needed due to signs of long-term overbought conditions. In summary, there is a medium to long-term bullish trend, but short-term caution is advised.

RSI



The Relative Strength Index (RSI) is a technical indicator that measures the speed and direction of a price movement to determine whether an asset is overbought or oversold. When the RSI is above 70, the asset is considered overbought, which may indicate a risk of a reversal to the downside. Conversely, an RSI below 30 indicates that the asset is oversold, suggesting a potential upward turnaround.

For Amazon stocks, the RSI chart shows a value of 0.787 for the most recent date, October 27, 2023. This value is close to the overbought threshold (70), suggesting that the asset could be overvalued with a risk of a correction to the downside. Historically, in recent months, Amazon's RSI has fluctuated, reaching peaks near the overbought level and at times falling below the 50 threshold, indicating bearish pressures. Recently, the RSI has started to rise, showing renewed bullish momentum.

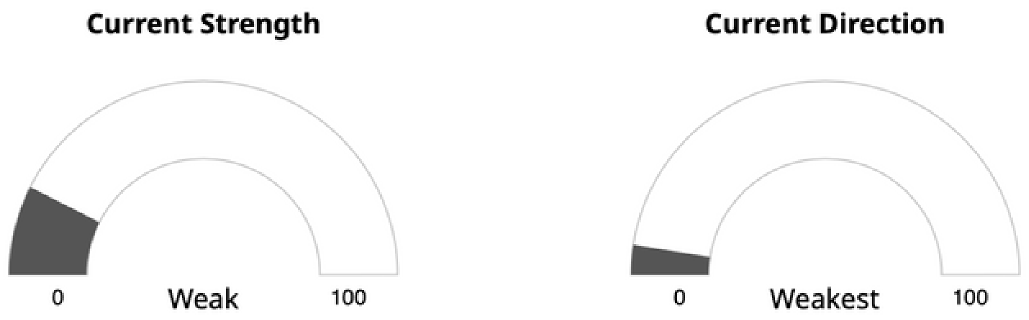
Taking into account the RSI values for Amazon, it appears that the stock is showing signs of possible short-term bearish pressure. The RSI, being close to the overbought zone, suggests that the stock could be overvalued. This could indicate that the stock is in a consolidation phase after a recent uptrend. If one considers other technical indicators such as Moving Averages (MAs) and Bollinger Bands (BBands), a more comprehensive picture may emerge. However, based solely on this RSI chart, Amazon stocks are likely to face short-term bearish pressure.

BARCHART OPINION

Overall Average:

8% BUY

Overall Average Signal calculated from all 13 indicators. Signal Strength is a long-term measurement of the historical strength of the Signal, while Signal Direction is a short-term (3-Day) measurement of the movement of the Signal.



INDICATOR	Opinion	Strength & Direction
Composite Indicator		
Trend Seeker®		SELL
Short Term Indicators		
20 Day Moving Average		SELL
20 - 50 Day MACD Oscillator		SELL
20 - 100 Day MACD Oscillator		SELL
20 - 200 Day MACD Oscillator	BUY	
20 - Day Average Volume: 55,031,547		Average: 50% SELL
Medium Term Indicators		
50 Day Moving Average		SELL
50 - 100 Day MACD Oscillator	BUY	
50 - 150 Day MACD Oscillator	BUY	
50 - 200 Day MACD Oscillator	BUY	
50 - Day Average Volume: 52,845,918		Average: 50% BUY
Long Term Indicators		
100 Day Moving Average		SELL
150 Day Moving Average	BUY	
200 Day Moving Average	BUY	
100 - 200 Day MACD Oscillator	BUY	
100 - Day Average Volume: 55,275,320		Average: 50% BUY

INDICATOR	Signal	Strength	Direction
Composite Indicator			
Trend Seeker®	SELL	Average	Weakest
Short Term Indicators			
20 Day Moving Average	SELL	Weak	Weakening
20 - 50 Day MACD Oscillator	SELL	Average	Weakest
20 - 100 Day MACD Oscillator	SELL	Weak	Strengthening
20 - 200 Day MACD Oscillator	BUY	Soft	Weakest
20 - Day Average Volume: 55,031,547			Average: 50% SELL
Medium Term Indicators			
50 Day Moving Average	SELL	Soft	Weakening
50 - 100 Day MACD Oscillator	BUY	Weak	Weakest
50 - 150 Day MACD Oscillator	BUY	Average	Weakest
50 - 200 Day MACD Oscillator	BUY	Strong	Weakest
50 - Day Average Volume: 52,845,918			Average: 50% BUY
Long Term Indicators			
100 Day Moving Average	SELL	Weak	Weakening
150 Day Moving Average	BUY	Weak	Strengthening
200 Day Moving Average	BUY	Soft	Strengthening
100 - 200 Day MACD Oscillator	BUY	Maximum	Weakest
100 - Day Average Volume: 55,275,320			Average: 50% BUY

Overall average signal: The average signal across all 13 indicators is 8% BUY. This suggests a bullish trend, but we must remain vigilant and that's why we decide to take a protective put.

Current strength: The visual representation of the stock's strength appears to be at a medium, suggesting that the share price is volatile but the trend remains upwards.

Current direction: The overall average signal is indicated as an "8% BUY", suggesting a marginal bullish sentiment. However, the "Current Direction" scale positions the signal towards the "weakest" end. This implies that the immediate momentum may not be robust and might require monitoring over the next 3 days to ascertain its actual trajectory.

Short-term indicators: The data shows mixed sentiments. While the Trend Seeker composite indicator suggests a "SELL" stance, the 200-day MACD Oscillator points towards a "BUY". This contrast implies a volatile and uncertain short-term outlook, with the 20-day MACD Oscillator and 20-day Moving Average leaning more towards a sell signal.

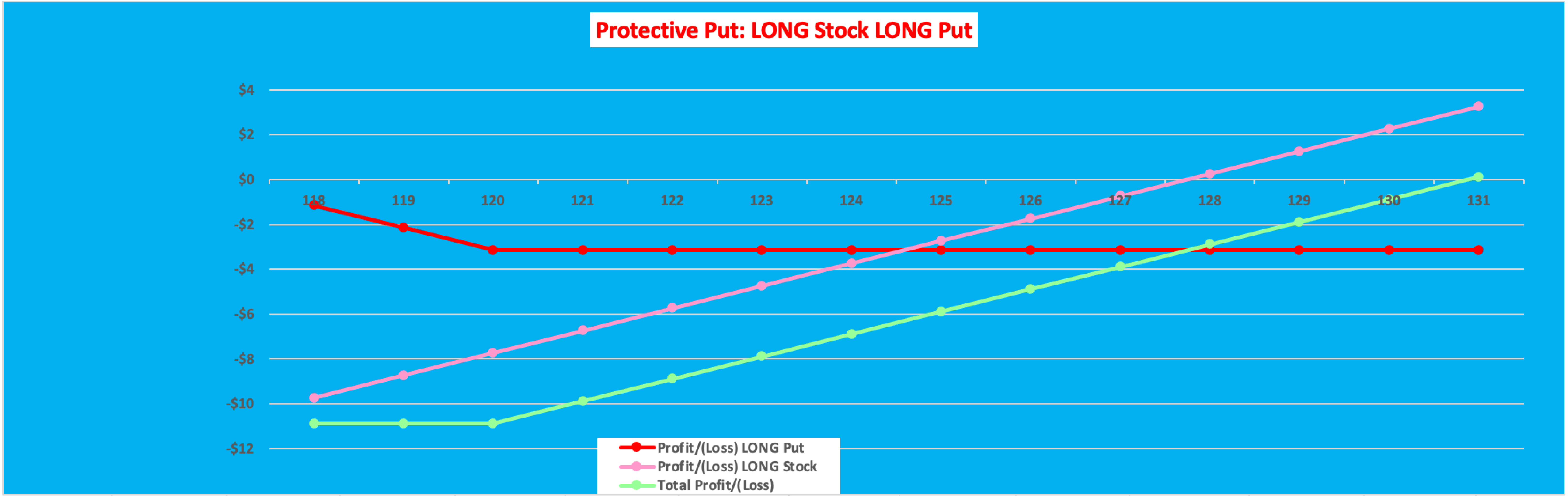
Medium-term indicators: There's a clearer consensus here, with a majority of indicators leaning towards a "BUY". Notably, the 50-day, 100-day, and 150-day MACD Oscillators all suggest buying, reinforcing a more optimistic medium-term outlook. However, with an average direction pointing towards "weakest", there may still be some potential for short-term pullbacks or consolidation.

Long-term indicators: On a longer horizon, the indicators are predominantly bullish. Both the 100 and 150-day Moving Averages, along with the 100-200-day MACD Oscillator, recommend a "BUY". This underlines a more steadfast and optimistic projection for the long haul.

To conclude, the data presents a generally optimistic viewpoint, especially in the medium to long term. While the short-term indicators are somewhat mixed, the stronger buy signals in the subsequent terms suggest a more confident and bullish outlook. It would, however, be wise for investors to keep an eye on the immediate direction and adjust strategies accordingly.

OPTION CHART

Protective Put (LONG Stock & LONG Put)															
	$118,00	$119,00	$120,00	$121,00	$122,00	$123,00	$124,00	$125,00	$126,00	$127,00	$128,00	$129,00	$130,00	$131,00	$132,00
Sell	$120,00	$120,00	$120,00	$121,00	$122,00	$123,00	$124,00	$125,00	$126,00	$127,00	$128,00	$129,00	$130,00	$131,00	$132,00
Buy	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74	$127,74
GM	-$7,74	-$7,74	-$7,74	-$6,74	-$5,74	-$4,74	-$3,74	-$2,74	-$1,74	-$0,74	$0,26	$1,26	$2,26	$3,26	$4,26
-OP	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500	$3,1500
Profit/(Loss)	$ (10,8900)	$ (10,8900)	$ (10,8900)	$ (9,8900)	$ (8,8900)	$ (7,8900)	$ (6,8900)	$ (5,8900)	$ (4,8900)	$ (3,8900)	$ (2,8900)	$ (1,8900)	$ (0,8900)	$ 0,1100	$ 1,1100
Total Profit/(Loss)	$ (33 759)	$ (33 759)	$ (33 759)	$ (30 659)	$ (27 559)	$ (24 459)	$ (21 359)	$ (18 259)	$ (15 159)	$ (12 059)	$ (8 959)	$ (5 859)	$ (2 759)	$ 341	$ 3 441



CALCULATIONS

AMAZON	Call	Put	Contract
Strike Price	$120,0000	$120,0000	100
Option Price	$11,8100	$3,1500	
Breakeven	$131,8100	$116,8500	
Number of Contracts	8	31	

BREAKEVEN

To calculate the breakeven point, we need to add the strike price to the option price. In our case, $120+$11,81. This gives us $131,81 for call option and $120-$3.15 = $116.85 for put option.

NUMBER OF CONTRACTS

Our maximum purchase amount is $10,000. So to find out the total number of contracts we can buy, we do investment amount/(option price*number of contract): 8 and 31. So we can buy 8 Amazon call option contracts and 31 put options contracts.

In our case, using the "protective put" method, we decide to cover our number of purchased shares with the number of option contracts. We have purchased 200 shares of Amazon. 1 option contract = 100 shares. 200/100 = 2. Therefore, we have decided to take 2 Amazon option contracts for our "protective put."

LEVERAGE

Leverage: 25,000/600 = **41.67**

NO CHANGE IN STOCK PRICE

Stock Market performance: 0%

Option performance: -$12,059
ROI: -48.24%

STOCK PRICE RAISE BY $10

Stock Market performance: 7.89%

Option performance: $ 15,841
ROI: 79.13%

STOCK PRICE FALL BY $10

Stock Market performance: -7.87%

Option performance: -$33,759
ROI: -100%

STOCKTRAK CONFIRMATION

AMZN

LAST PRICESS	DAY'S CHANGE	BID/ASK
127.74	8.17	127.72/127.75
DAY'S RANGE	**DAY'S VOLUME**	
125.52 - 130.02	125,309,313	

Buy | Sell To Open | Buy To Close | Sell

CALL / PUT	EXPIRY	STRIKE (show all)
Put	12/15/2023	120

2 CONTRACTS

ORDER TYPE	LIMIT/STOP PRICE	DURATION
Market	$0.00	Good for Day

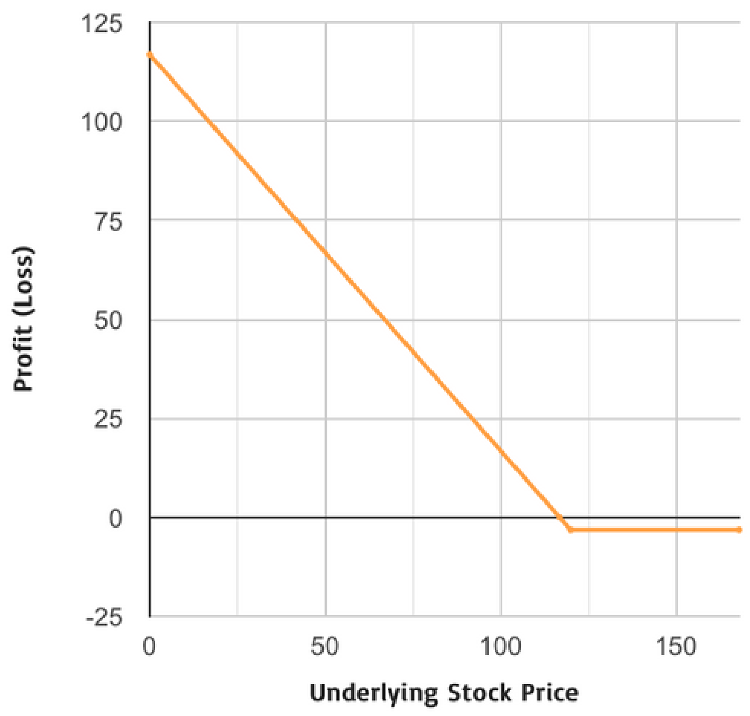
Estimated Order Total
$650.00

Review Order

Option Details For AMZN2315X120

Last Price	3.15
Day's Change	-4.3
Bid/Ask	3.10 / 3.20
Day's Range	2.44 - 3.95
Day's Volume	8,272

Option Payout Diagram



10/28/2023 **Cancel**	Market-Buy	**AMZN2315X120**	2	MKT	Open	Options	USD	Open	GTC

OPTION 5
PUT META

Doriane Duteil

OPTION SYMBOL

OPTION DETAILS META2315X225

CORRECT SYMBOL META121523P00225000

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is META.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd) so on the 15th of December 2023.
- In our case, the expiration date shoud be represented as followed: 121523

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a Put so it should be represented as P

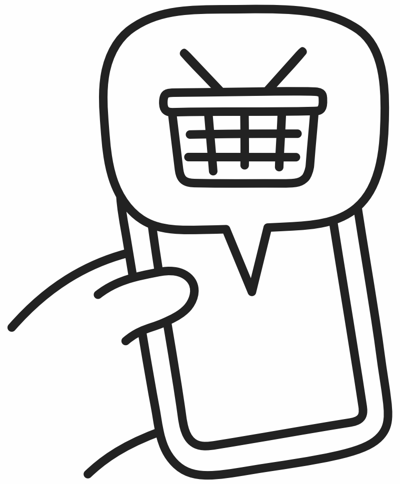
STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $225 so it should be represented as 00225000

FUNDAMENTAL ANALYSIS

INDUSTRY



INDUSTRY:

Software and It Service industry, is the digital marketplace for consumer products. It offers convenience, a wide product selection, fast shipping, and various payment options. E-commerce has transformed the way we shop, breaking down geographical barriers and becoming an integral part of the modern consumer experience.

INDUSTRY LEADER:

Microsoft, Visa A, Adobe

INDUSTRY KEY NUMBERS:

Total sales: US$659.00bn
Growth: 5.42%- US$858.10bn by 2028

COMPANY

COMPANY:

Meta Platforms, Inc. engages in the development of products that enable people to connect and share with friends and family through mobile devices, personal computers, virtual reality headsets, and wearables worldwide. It operates in two segments, Family of Apps and Reality Labs

COMPANY KEY NUMBERS:

Total revenue in 2022: $116.609B
Workforce: more than 1.54 millions
Market share: 37.8%
Beta: 1.21
PER: 62.28

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 22.69
Return on Equity TTM: 63.35%
Gross Margin TTM: 57.84%
Total Debt to Equity MRQ: 335.56%
Price to Book MRQ: 32.83

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 25.65
Return on Equity TTM: 22.28%
Gross Margin TTM: 80.12%
Total Debt to Equity MRQ: 25.81%
Price to Book MRQ: 5.53

Meta's financial performance, when compared to industry averages, presents a mixed picture. The company's P/E ratio of 25.65 is above the industry average of 22.69 , suggesting a potential overdervaluation. While its Return on Equity (ROE) of 22.28% is well below the industry norm of 63.35%, Meta maintains a higher Gross Margin at 80.12% compared to the industry's 57.84%. Furthermore, Meta demonstrates a more conservative approach to debt with a Total Debt to Equity ratio of 25.81%, notably lower than the industry average of 335.56%. Lastly, its Price to Book ratio of 5.53 is also below the industry mark of 32.83, suggesting that its assets are more affordably valued. Overall, Meta exhibits a sound financial position with certain metrics indicating more favorable financial management and asset valuation than its industry counterparts.

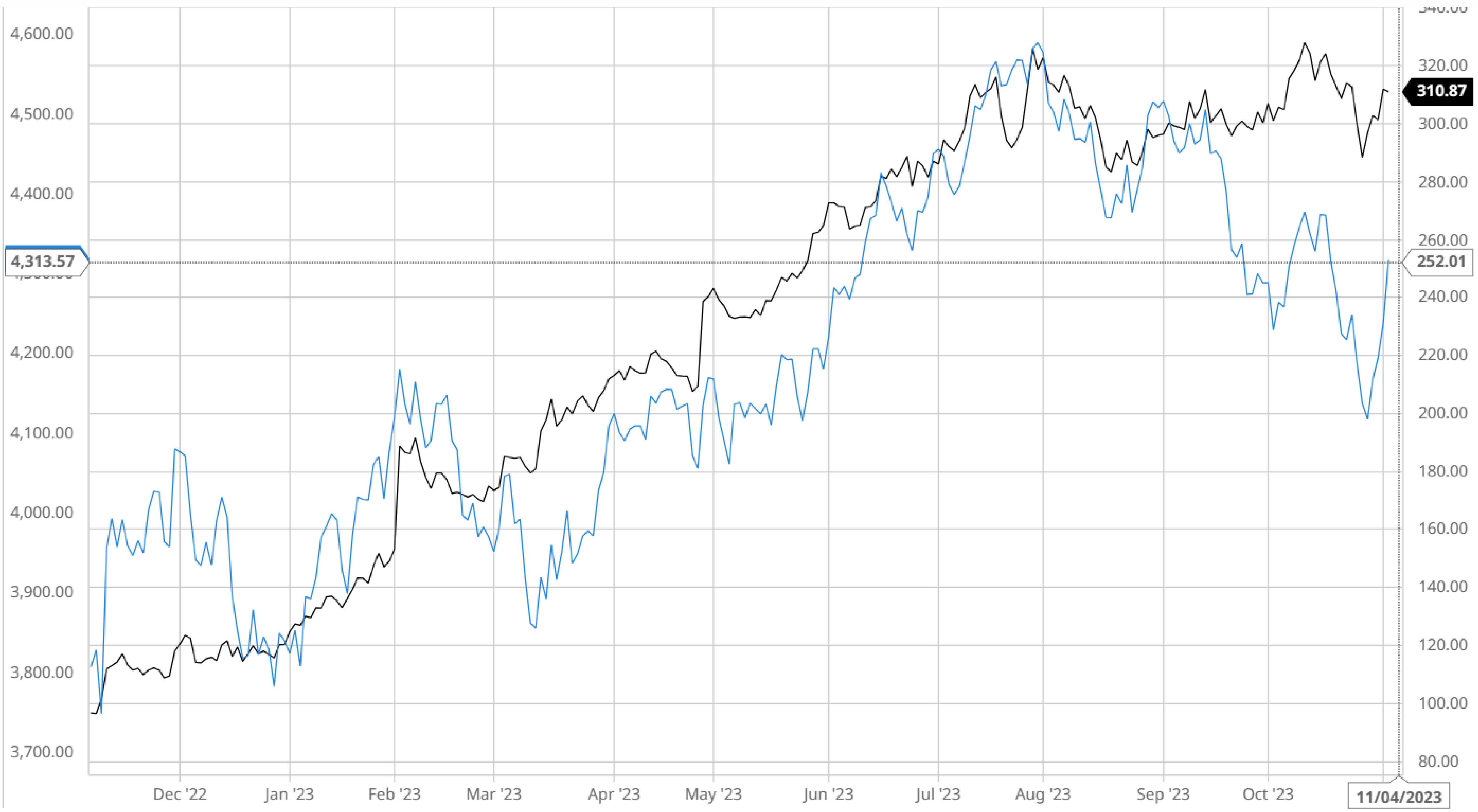
In conclusion, Amazon's financial indicators, when juxtaposed against industry benchmarks, reveal a company that prudently manages its assets and finances. Despite certain metrics like the ROE falling slightly short of industry standards, the company shines in areas like Gross Margin and a conservative debt strategy. The comparatively lower P/E and Price to Book ratios further emphasize the potential attractiveness of Amazon's valuation. All these factors, taken together, suggest that Amazon stands on a solid financial footing, striking a balance between growth, value, and risk management in a competitive industry landscape.

PRICE HISTORY

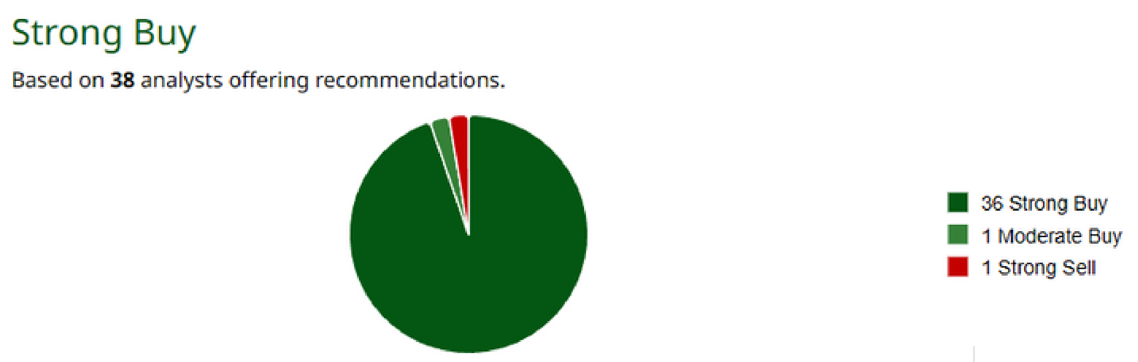
ONE YEAR PERFORMANCE:
META (black) : 228,16%

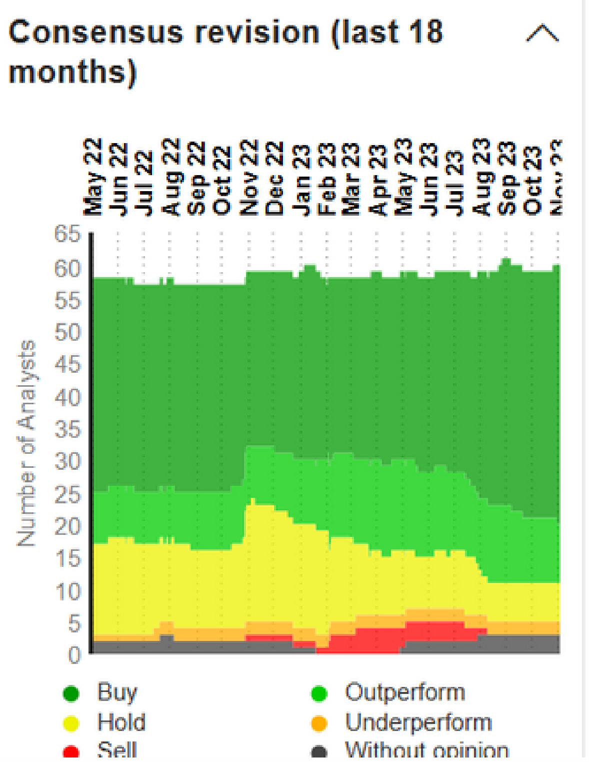
Over the past year, Meta has outperformed the S&P 500 index. The chart shows a 228,16% increase for META, compared to S&P 500.However, we can notice several fluctuation of theses 2 index and get crossed several time such as in July and September' 23. It highlights a volatility of its share price.

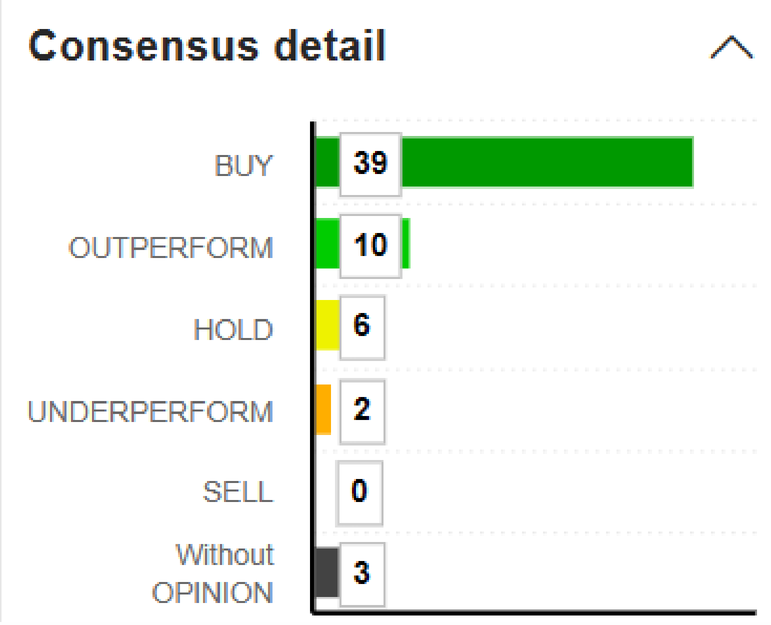
This year, compared with the S&P 500 index, META's trajectory is variable and shows a complex activity of META highly impacted by what's going on in the news.



OVERALL CONSENSUS / TARGET PRICE







To understand how the recommendation rate is calculated, we will use the weighted average method. We'll give each category a value that will increase its weight in the final calculation.

Buy: 1, Outperform: 2, Hold: 3 Underperform: 4 Sell: 5

We will then count the number of analyst opinions by multiplying them by their weight.

Buy signal = 39, Outperform = 20 Hold = 18, Underperform = 8, Sell = 0

We then add up all the products = 85 ÷ 57 = 1.49

Analyst recommendations for the META company reveals a strong consensus of sTRONG since May 2022 as we can see below. A "strong buy" rating usually implies a high degree of confidence in the stock's potential for growth and profitability. It's important to note that the consensus recommendation is not a guarantee of future performance. As a changing and complex industry, the share price can change a day to another and therefore rise even more concern for the investors that invest in this industry

HOT NEWS

ARTICLE

Published on 28th of October; 2pm

ONG Reset has created fake Facebook pages using automated software, which have been used for malicious activities like propaganda and pro-Kremlin campaigns. Researchers have identified a network of 242,000 pages launched in 2021, which has spread Russian propaganda and trompe-l'oeil over the past two years. The network has gained exponential importance since 2022, causing thousands of euros in advertising that violates Meta's terms of use. Meta has been aware of this network since September 2022, but has not managed to stop its activities, posing risks to consumers and threatening the democratic integrity of the European Union. The lack of measures taken by Meta could lead to its compliance with the new EU framework, the Digital Services Regulation (DSR).

CONCLUSION :

In the actual society, a lot of fake new is spread but not always controlled or known. These hve a great impact on life, news and cn create dangerous situation if it is not stop. However, Meta had several scandal of pages such as this bellow and has a consequent impact on the image of Meta that is decreasing more and more due to a lack control of these pages.

STRATEGY

WHY HAVE YOU CHOSEN THIS OPTION STRATEGY?

Our decision to invest $10,000 in a META put was based on a thorough analysis of financial data and current market trends. We based our decision on several key factors.

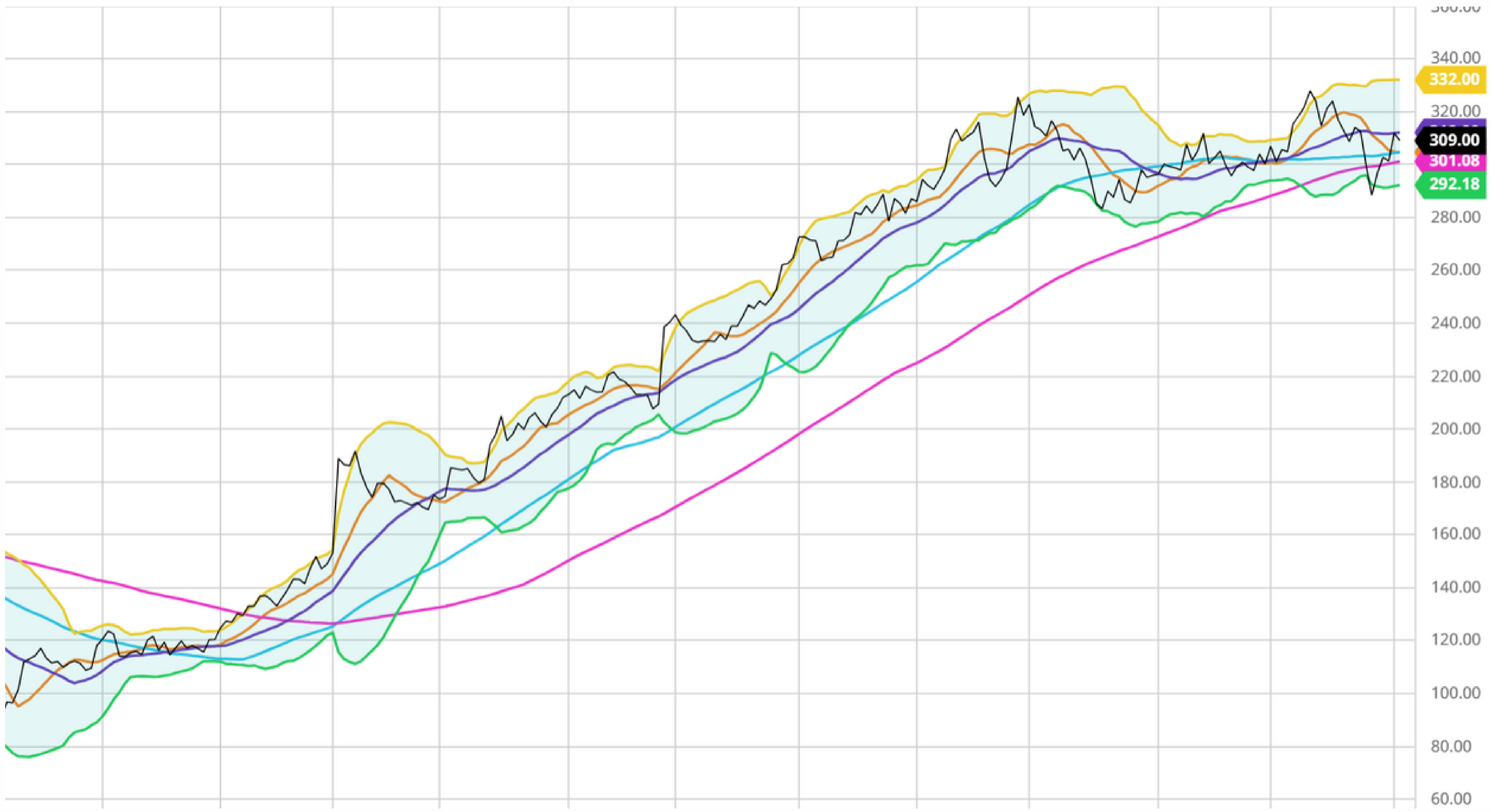
- SECTOR: META operates in Software and IT service industry, which is experiencing strong demand due to demographic growth, however this setor is under some pressure of sharing private information, governements legislation, fake news, cybersecurity and so on. Therefore this industry is complex and uncertain

- Financial performance: Through the financial figures we can notice that the coporation performance is great through a higher P/E ration

- Indicator: Lately Meta falls in the market due to all the news such as the article we study and so even with a great performance, the investors trust less META than before and so create the fall of META in the market and so into investors porfolio

In short, our strategy is based on in-depth analysis and solid fundamentals, reinforcing our belief that this investment in META is a tricky one and so to short it to avoid any possible risk.

MOVING AVERAGE AND BOLLINGER BANDS



The share's current value, at **309.00** , lies above all MA's suggests a bullish trend or positive momentum in the stock. However, the fact that it is closer to the median of the Bollinger Bands suggests the potential for a short-term upward movement. Caution is called for.

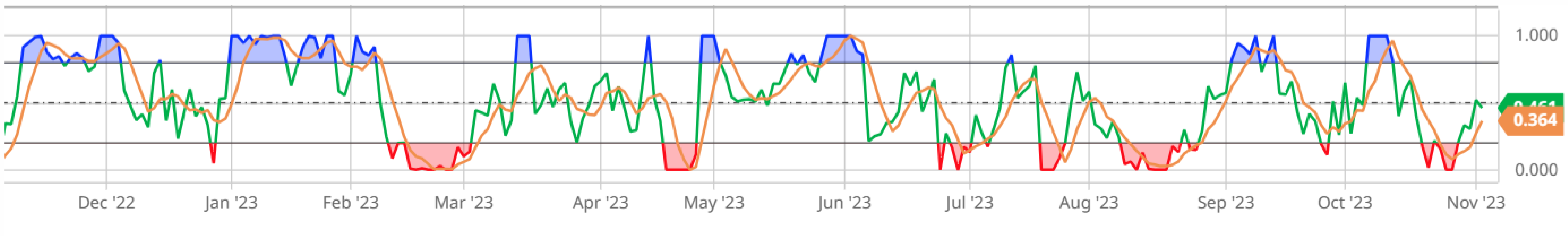
MOVING AVERAGES (MA):

- **MA10 (orange)**: At **304.50**, it is lower than current share price of **309.00**, suggesting an upward trend
- **MA50 (blue)**: With a value of **304.68**, it is above the MA10 and lower the current share value, can indicate a downward trend at short-term
- **MA100(pink)**: Positioned at **301.08**, this moving average is below current levels. This indicates that the current price is above the 100-day moving average, suggesting some strength in the recent performance of the stock

BOLLINGER BANDS (BBANDS):

- **Upper band (yellow)**: At **332.00**, it represents a potential overbought level where the price could meet resistance.
- **Median Band (purple)**: At **312.11**, this is higher than the current share price. This can suggest that the stock is currently in an uptrend phase. It indicates that the current price is above the medium-term trend, which may signal strength in the recent performance of the stock
- **Lower band (green)**: At **292.18**, if the price approaches this value, it could indicate that the stock is in oversold condition and could soon rebound.

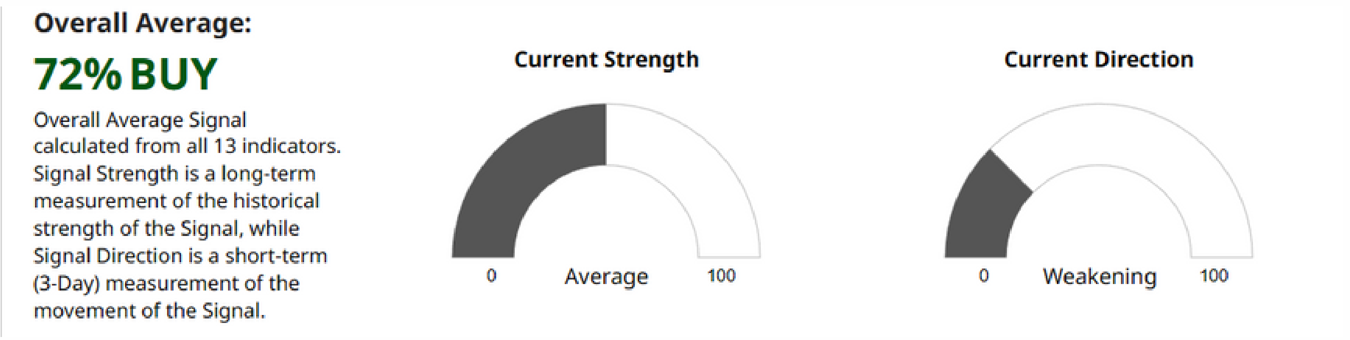
RSI

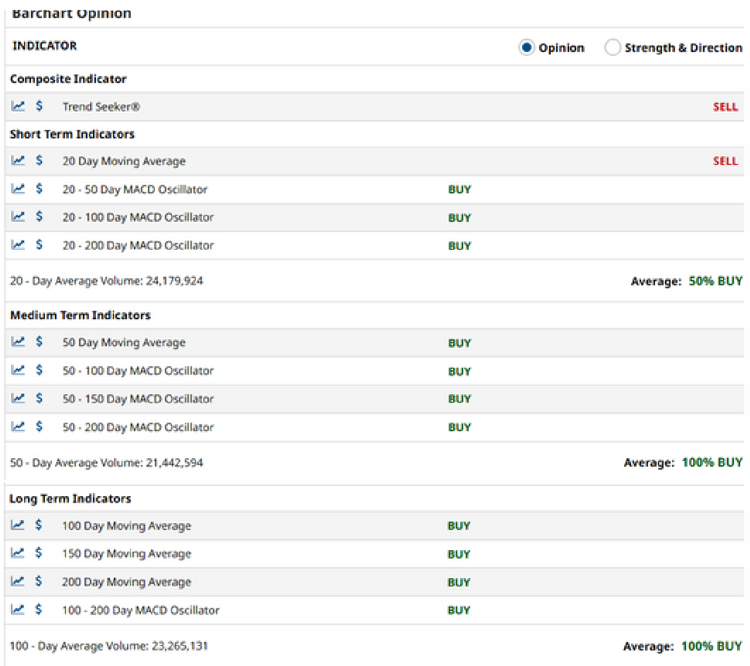


The Relative Strength Index (RSI) is a technical indicator that measures the speed and direction of a price movement to determine whether an asset is overbought or oversold. When the RSI is above 70, the asset is considered overbought, which may indicate a risk of a reversal to the downside. Conversely, an RSI below 30 indicates that the asset is oversold, suggesting a potential upward turnaround.
For META option , the RSI chart shows a value of 0.802 for the most recent date, November 4 , 2023. This value is above of the overbought threshold (70), suggesting that the asset could be overvalued with a risk of a correction to the downside. Historically, in recent months, Meta's RSI has fluctuated, reaching peaks near the overbought level and at times falling below the 50 threshold, indicating bearish pressures. Recently, the RSI has started to rise, showing renewed bullish momentum.

Taking into account the RSI values for Meta, it appears that the stock is showing signs of possible short-term bearish pressure. The RSI, being close to the overbought zone, suggests that the stock could be overvalued. This could indicate that the stock is in a consolidation phase after a recent uptrend. If one considers other technical indicators such as Moving Averages (MAs) and Bollinger Bands (BBands), a more comprehensive picture may emerge. However, based solely on this RSI chart, Amazon stocks are likely to face short-term bearish pressure.

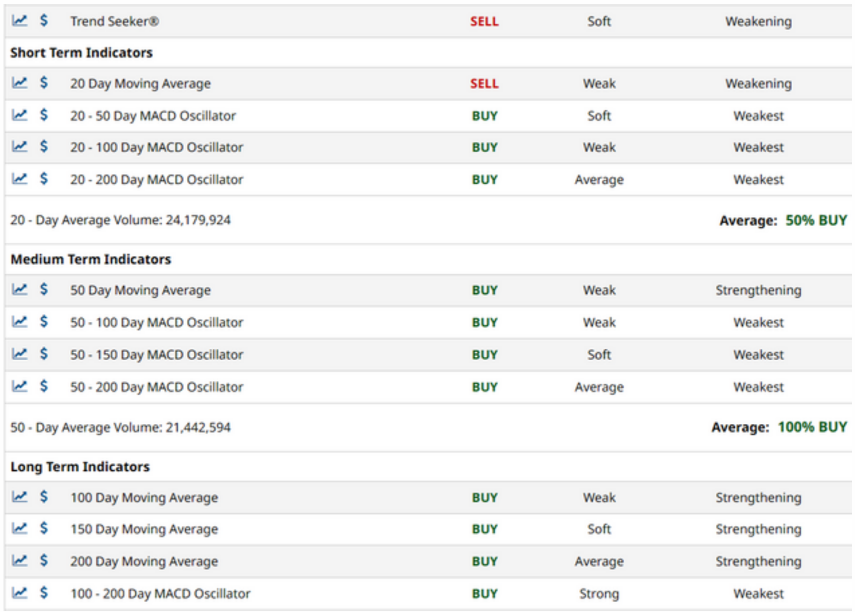
BARCHART OPINION





Barchart Opinion

INDICATOR	Opinion	
Composite Indicator		
Trend Seeker®		SELL
Short Term Indicators		
20 Day Moving Average		SELL
20 - 50 Day MACD Oscillator	BUY	
20 - 100 Day MACD Oscillator	BUY	
20 - 200 Day MACD Oscillator	BUY	
20 - Day Average Volume: 24,179,924		Average: 50% BUY
Medium Term Indicators		
50 Day Moving Average	BUY	
50 - 100 Day MACD Oscillator	BUY	
50 - 150 Day MACD Oscillator	BUY	
50 - 200 Day MACD Oscillator	BUY	
50 - Day Average Volume: 21,442,594		Average: 100% BUY
Long Term Indicators		
100 Day Moving Average	BUY	
150 Day Moving Average	BUY	
200 Day Moving Average	BUY	
100 - 200 Day MACD Oscillator	BUY	
100 - Day Average Volume: 23,265,131		Average: 100% BUY



Trend Seeker®	SELL	Soft	Weakening
Short Term Indicators			
20 Day Moving Average	SELL	Weak	Weakening
20 - 50 Day MACD Oscillator	BUY	Soft	Weakest
20 - 100 Day MACD Oscillator	BUY	Weak	Weakest
20 - 200 Day MACD Oscillator	BUY	Average	Weakest
20 - Day Average Volume: 24,179,924			Average: 50% BUY
Medium Term Indicators			
50 Day Moving Average	BUY	Weak	Strengthening
50 - 100 Day MACD Oscillator	BUY	Weak	Weakest
50 - 150 Day MACD Oscillator	BUY	Soft	Weakest
50 - 200 Day MACD Oscillator	BUY	Average	Weakest
50 - Day Average Volume: 21,442,594			Average: 100% BUY
Long Term Indicators			
100 Day Moving Average	BUY	Weak	Strengthening
150 Day Moving Average	BUY	Soft	Strengthening
200 Day Moving Average	BUY	Average	Strengthening
100 - 200 Day MACD Oscillator	BUY	Strong	Weakest

Overall average signal: The average signal across all 13 indicators is 72% BUY. This indicates strong bullish sentiment across a variety of technical indicators.

Current strength: The visual representation of the stock's strength appears to be at a medium, suggesting that the share price is volatile.

Current direction: The overall average signal is indicated as an "25% BUY", suggesting a marginal bullish sentiment. However, the "Current Direction" scale positions the signal towards the "weakest" end. This implies that the immediate momentum may not be robust and might require monitoring over the next 3 days to ascertain its actual trajectory.

Short-term indicators: The data shows mixed sentiments. While the Trend Seeker composite indicator suggests a "SELL" stance, the 200-day MACD Oscillator points towards a "BUY". This contrast implies an little uncertainy on short-term outlook, with the 20-day MACD Oscillator and 20-day Moving Average leaning more towards a buy signal.

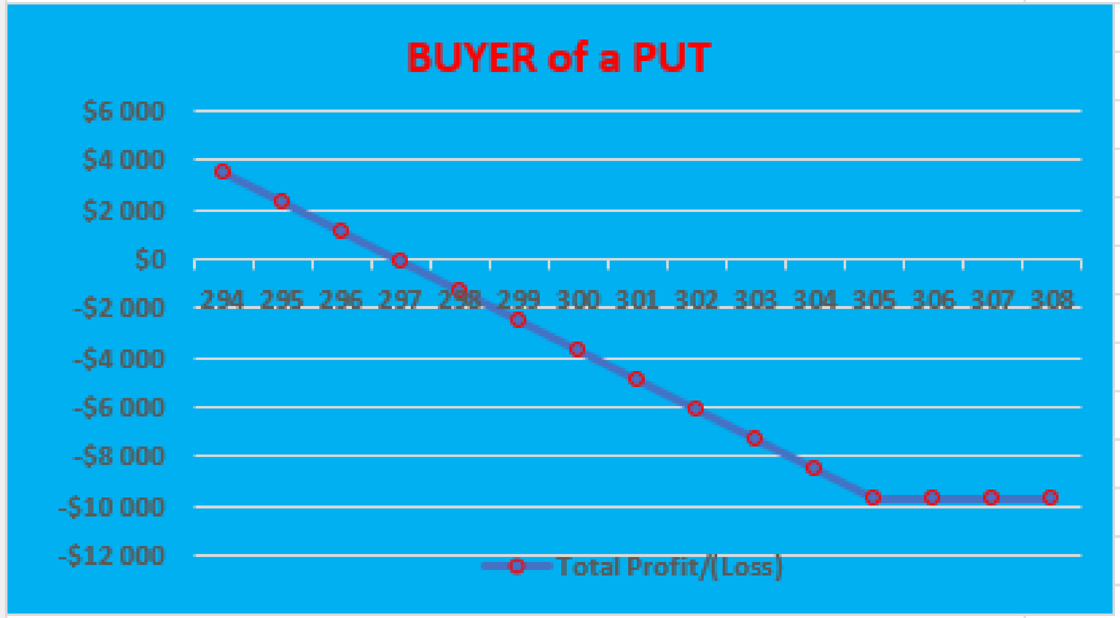
Medium-term indicators: There's a clearer consensus here, with a majority of indicators leaning towards a "BUY". Notably, the 50-day, 100-day, and 150-day MACD Oscillators all suggest buying, reinforcing a more optimistic medium-term outlook. However, with an average direction pointing towards "weakest", there may still be some potential for short-term pullbacks or consolidation.

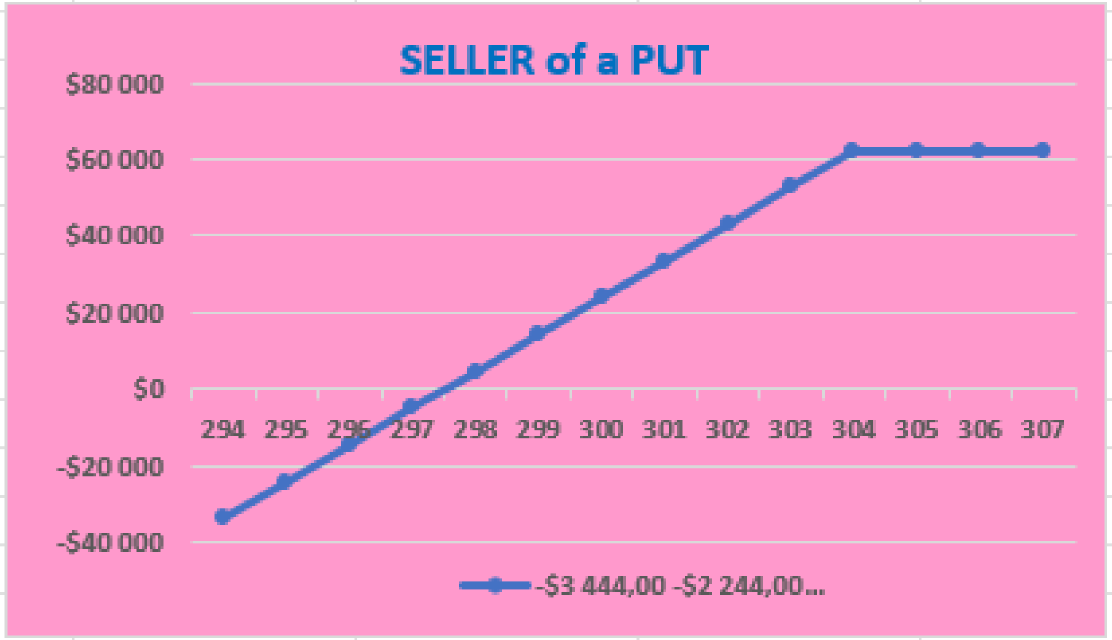
Long-term indicators: On a longer horizon, the indicators are predominantly bullish. Both the 100 and 150-day Moving Averages, along with the 100-200-day MACD Oscillator, recommend a "BUY". This underlines a more steadfast and optimistic projection for the long haul.

To conclude, the data presents a generally optimistic viewpoint, especially in the medium to long term. While the short-term indicators are somewhat mixed, the stronger buy signals in the subsequent terms suggest a more confident and bullish outlook. It would, however, be wise for investors to keep an eye on the immediate direction and adjust strategies accordingly.

OPTION CHART

What if	$294,00	$295,00	$296,00	$297,00	$298,00	$299,00	$300,00	$301,00	$302,00	$303,00	$304,00	$305,00	$306,00	$307,00	$308,00
PUT BUYER=LONG PUT															
Sell	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00	$305,00
Buy	$294,00	$295,00	$296,00	$297,00	$298,00	$299,00	$300,00	$301,00	$302,00	$303,00	$304,00	$305,00	$306,00	$307,00	$308,00
GM	$11,0000	$10,0000	$9,0000	$8,0000	$7,0000	$6,0000	$5,0000	$4,0000	$3,0000	$2,0000	$1,0000	$0,0000	-$1,0000	-$2,0000	-$3,0000
GM adj	$11,0000	$10,0000	$9,0000	$8,0000	$7,0000	$6,0000	$5,0000	$4,0000	$3,0000	$2,0000	$1,0000	$0,0000	$0,0000	$0,0000	$0,0000
-OP	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300
Profit/(Loss)	$2,8700	$1,8700	$0,8700	-$0,1300	-$1,1300	-$2,1300	-$3,1300	-$4,1300	-$5,1300	-$6,1300	-$7,1300	-$8,1300	-$8,1300	-$8,1300	-$8,1300
Total Profit/(Loss)	$3 444,00	$2 244,00	$1 044,00	-$156,00	-$1 356,00	-$2 556,00	-$3 756,00	-$4 956,00	-$6 156,00	-$7 356,00	-$8 556,00	-$9 756,00	-$9 756,00	-$9 756,00	-$9 756,00
What if	$294,000	$295,000	$296,000	$297,000	$298,000	$299,000	$300,000	$301,000	$302,000	$303,000	$304,000	$305,000	$306,000	$307,000	$308,000
PUT SELLER (Writer)=SHORT PUT															
Sell	$294,000	$295,000	$296,000	$297,000	$298,000	$299,000	$300,000	$301,000	$302,000	$303,000	$304,000	$305,000	$306,000	$307,000	$308,000
Buy	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000	$305,000
GM	-$11,0000	-$10,0000	-$9,0000	-$8,0000	-$7,0000	-$6,0000	-$5,0000	-$4,0000	-$3,0000	-$2,0000	-$1,0000	$0,0000	$1,0000	$2,0000	$3,0000
GM adj	-$11,0000	-$10,0000	-$9,0000	-$8,0000	-$7,0000	-$6,0000	-$5,0000	-$4,0000	-$3,0000	-$2,0000	-$1,0000	$0,0000	$0,0000	$0,0000	$0,0000
+OP	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300	$8,1300
Profit/(Loss)	-$2,8700	-$1,8700	-$0,8700	$0,1300	$1,1300	$2,1300	$3,1300	$4,1300	$5,1300	$6,1300	$7,1300	$8,1300	$8,1300	$8,1300	$8,1300
Total Profit/(Loss)	-$3 444,00	-$2 244,00	-$1 044,00	$156,00	$1 356,00	$2 556,00	$3 756,00	$4 956,00	$6 156,00	$7 356,00	$8 556,00	$9 756,00	$9 756,00	$9 756,00	$9 756,00





CALCULATIONS

META	Call	Put	Contract	
Strike Price	$305,0000	$305,0000	100	shares
Option Price	$13,9500	$8,1300		
Breakeven	$318,9500	$296,8700		
Number of Contracts	7	12		

BREAKEVEN

to calculate the breakeven point, we need to add the strike price to the option price. In our case, $305-$8,13. This gives us $296,87

NUMBER OF CONTRACTS

Our maximum sell amount is $305. So to find out the total number of contracts we can sell, we do investment amount/(option price*number of contract): 1. So we can sell 12 META put option contracts.

NO CHANGE IN STOCK PRICE

Stock Market performance: 0%
ROI: 0%

Option performance: -$9,866
ROI: -100%

STOCK PRICE RAISE BY $10

Stock Market performance: -$870
ROI: -9%

Option performance: -$9,866
ROI: -100%

STOCK PRICE FALL BY $10

Stock Market performance: $870
ROI: 9%

Option performance: $2.244
ROI: 22%

META

LAST PRICESS	DAY'S CHANGE	BID/ASK
310.95	-0.90	310.91/310.99

DAY'S RANGE	DAY'S VOLUME
309.07 - 318.82	8,329,314

Buy | **Sell To Open**

Buy To Close | **Sell**

CALL / PUT	EXPIRY	STRIKE (show all)
Put	12/1/2023	305

12 **CONTRACTS**

ORDER TYPE	LIMIT/STOP PRICE	DURATION
Market	$0.00	Good for Day

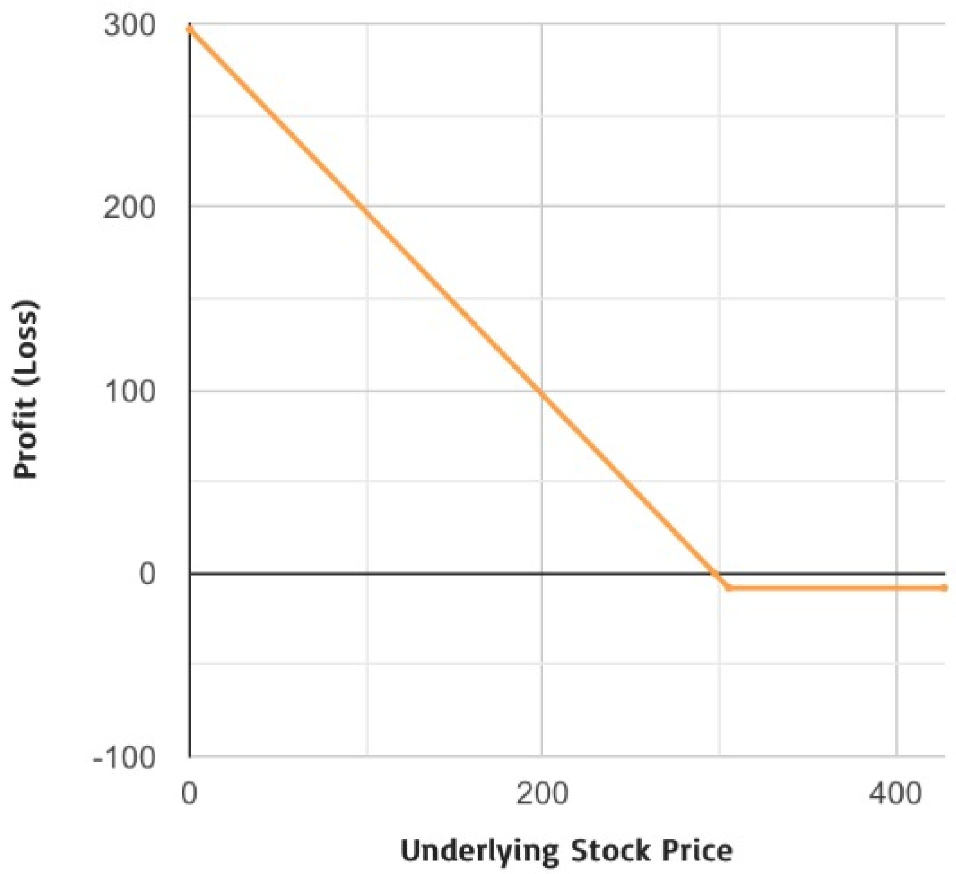
Estimated Order Total
$10,330.00

Review Order

Option Details For META2301X305

Last Price	8.13
Day's Change	0.34
Bid/Ask	7.50 / 7.65
Day's Range	5.85 - 8.13
Day's Volume	18

Option Payout Diagram



OPTION 6
SARTORIUS STEDIM BIOTECH

Basile ARTHAUD

OPTION SYMBOL

Option Details For NVO2315L100

CORRECT SYMBOL NVO121523C00100000

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option's underlying stock.
- For the provided option symbol, this field is SDMHF.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd).
- In our case, the expiration date shoud be represented as followed: 20231105

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the option is a call so it should be represented as C

STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $187 so it should be represented as 00187000

FUNDAMENTAL ANALYSIS

INDUSTRY

INDUSTRY:
The biotechnology sector, characterized by advanced life sciences research and innovative solutions, is experiencing significant growth and impact. Sartorius Stedim Biotech, a notable player in this industry, stands out for its commitment to cutting-edge technologies and solutions that contribute to advancements in biopharmaceutical manufacturing.

INDUSTRY LEADER::
Notable leaders in the biotechnology sector, alongside Sartorius Stedim Biotech, include companies such as Thermo Fisher Scientific, Amgen, and Illumina. These organizations are at the forefront of driving innovation and setting industry standards.

INDUSTRY KEY NUMBERS:
Total sales: $1,291B
Growth: 6.8%
Market share: North America (47.2%), Europe (24.5%) China (9.7%)

COMPANY

SARTORIUS

COMPANY:
Sartorius Stedim Biotech (SDMHF) is a multinational life sciences company founded in It is renowned for its innovative solutions in the biotechnology sector, offering cutting-edge products and services for the pharmaceutical and biopharmaceutical industries. Sartorius Stedim Biotech plays a key role in the research, development and manufacture of biological products.

COMPANY KEY NUMBERS:
Total revenue: $54.30B
Workforce: 53 000
Market share: 3.2%
Beta: 0.76
PER: 45,68

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 8.02
Return on Equity TTM: 31.74%
Gross Margin TTM: 69.03%
Total Debt to Equity MRQ: 116.23%
Price to Book MRQ: 7.29

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 26.60.
Return on Equity TTM: 18,66 %
Gross Margin TTM: 15,56%
Total Debt to Equity MRQ: %
Price to Book MRQ: 28,27

A more in-depth analysis would require a direct comparison of the company's financial ratios with market or industry averages. For example, a P/E ratio of 26.60 may seem reasonable on its own, but if it is significantly higher than the industry average, it could indicate that the stock is relatively expensive compared with its peers. Similarly, an ROE of 18.66% is positive, but its full interpretation requires comparison with industry norms to assess whether the company is earning a higher or lower return on equity than other players in the market.

The gross margin of 15.56% is an indicator of profitability, but it must be assessed in the light of industry practice. Some sectors naturally have higher margins than others. A comparison with industry peers would provide valuable context.

The debt level of 3.79 billion is also an important point. While it is necessary to assess the company's ability to manage this debt, it is also crucial to compare this amount with industry norms. Debt that might seem high in one industry might be considered modest in another.

Finally, the Price to Book ratio of 28.27 needs to be put into context. A low ratio may indicate undervaluation, but this can vary considerably from sector to sector. Some sectors traditionally place a higher value on book value, while others place less emphasis on it.

In summary, while the figures presented give a positive indication, the most meaningful analysis would require a detailed comparison with market or industry averages. Historical trends and future prospects should also be taken into account to obtain a complete assessment of the company's financial position.

OPTION 7
LONG STRADDLE WARNER BROS

Titouan CLEMENT

OPTION SYMBOL

OPTION DETAILS FOR WBD2317K11.5 AND WBD2317W11.5

CORRECT SYMBOL : WBD111723C00011500 AND WBD111723P00011500

ROOT SYMBOL

- The first field is identical to the ticker symbol for the option’s underlying stock.
- For the provided option symbol, this field is **WBD**.

EXPIRATION DATE:

- The expiration date is represented in the year-month-day order: (yy)(mm)(dd).
- In our case, the expiration date shoud be represented as followed: **111723**

CALL/PUT INDICATOR:

- This indicates whether the option is a contract to call (buy) or to put (sell) a stock.
- In our case, the options are a call and a putt so it should be represented as **C and P**

STRIKE PRICE (EIGHT DIGITS)

- This is always eight digits to indicate the strike price.

In our case, the strike price is $11,5 so it should be represented as 00011500

FUNDAMENTAL ANALYSIS

INDUSTRY

INDUSTRY:
The entertainment industry, with companies such as Warner Bros., is also one of the world's largest and most dynamic. It encompasses the production, distribution, and marketing of movies, television shows, video games, music, and other forms of entertainment.

INDUSTRY LEADER:
Warner Bros., Universal Pictures, Paramount Pictures, Sony Pictures, Walt Disney Studios.

INDUSTRY KEY NUMBERS:
Total sales: $27,291B
Growth: 8%
Market share:
North America (75), Europe (15%) China (10%)

COMPANY

COMPANY:
Warner Bros. Discovery, Inc. is a global media and entertainment company. The Company operates through three segments: Studios, Networks and DTC. The Studios segment includes the production and release of feature films for theatrical release, and the production and initial licensing of television programs to third parties.

COMPANY KEY NUMBERS:
Total revenue 2022: $33.82B
Workforce: 37 500
Market share: 10,6%
Beta: 1,51
PER: -4,29

VALUATION

INDUSTRY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): 28,12
Return on Equity TTM: 8.25%
Gross Margin TTM: 40.91%
Total Debt to Equity MRQ: -33.88%
Price to Book MRQ:0,15

COMPANY

FINANCIAL RATIOS

P/E Ratio TTM (Price-to-Earnings Ratio): -4,27
Return on Equity TTM: -13.88%
Gross Margin TTM: 38.29%
Total Debt to Equity MRQ: 104.04%
Price to Book MRQ: 0,63

Warner Bros. has a positive P/E ratio, suggesting that investors are willing to pay a high price relative to the company's earnings, while the industry as a whole has a negative net income on a quarterly basis.

Warner Bros. has a positive ROE, meaning that it generates an acceptable net profit in relation to its shareholders' equity, whereas the industry as a whole has a negative ROE.

Warner Bros. has a better gross margin than the industry, which may indicate more efficient management of production costs and an ability to maintain higher profit margins.

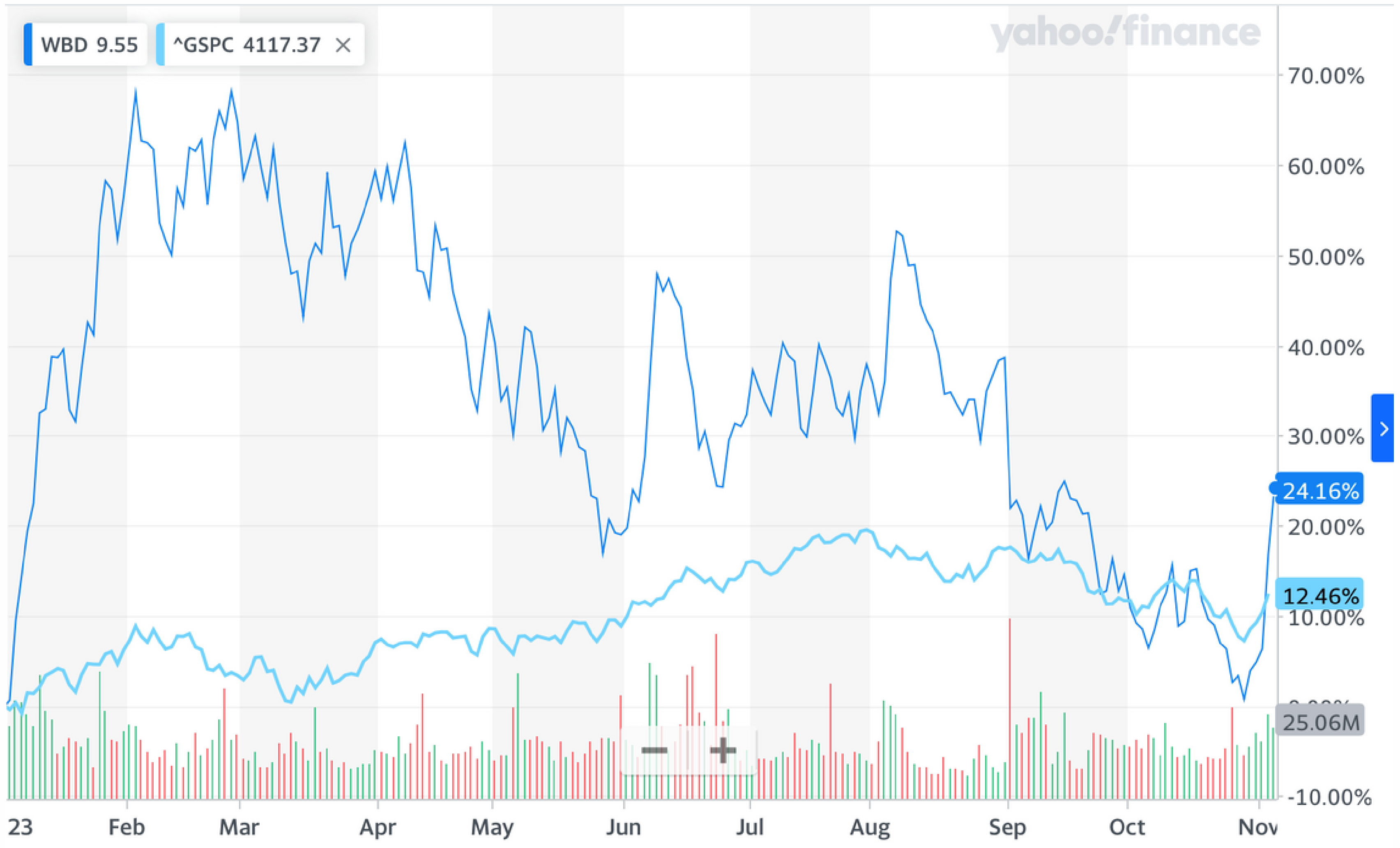
Warner Bros. appears to have a stronger financial structure, with more equity than debt, whereas the industry as a whole is highly leveraged.
Warner Bros. is valued at a lower multiple of net book value than the industry as a whole, which may suggest that the market perceives Warner Bros. as undervalued relative to the value of its assets.

In summary, Warner Bros. appears to be performing relatively better financially than the industry as a whole, particularly in terms of profitability, gross margin and financial structure.

PRICE HISTORY

ONE YEAR PERFORMANCE:

SP500 (light blue line): 12,46%
Novo Nordisk (blue line): 24,16%



Over the past year, the performance of Warner shares has far outstripped that of the S&P 500 index. As the chart shows, Novo Nordisk recorded an impressive rise of 24%, while the S&P 500 index gained just 12%. Warner's clear outperformance can be attributed to a number of factors, such as strong financial results, positive company announcements and advances in its product portfolio.

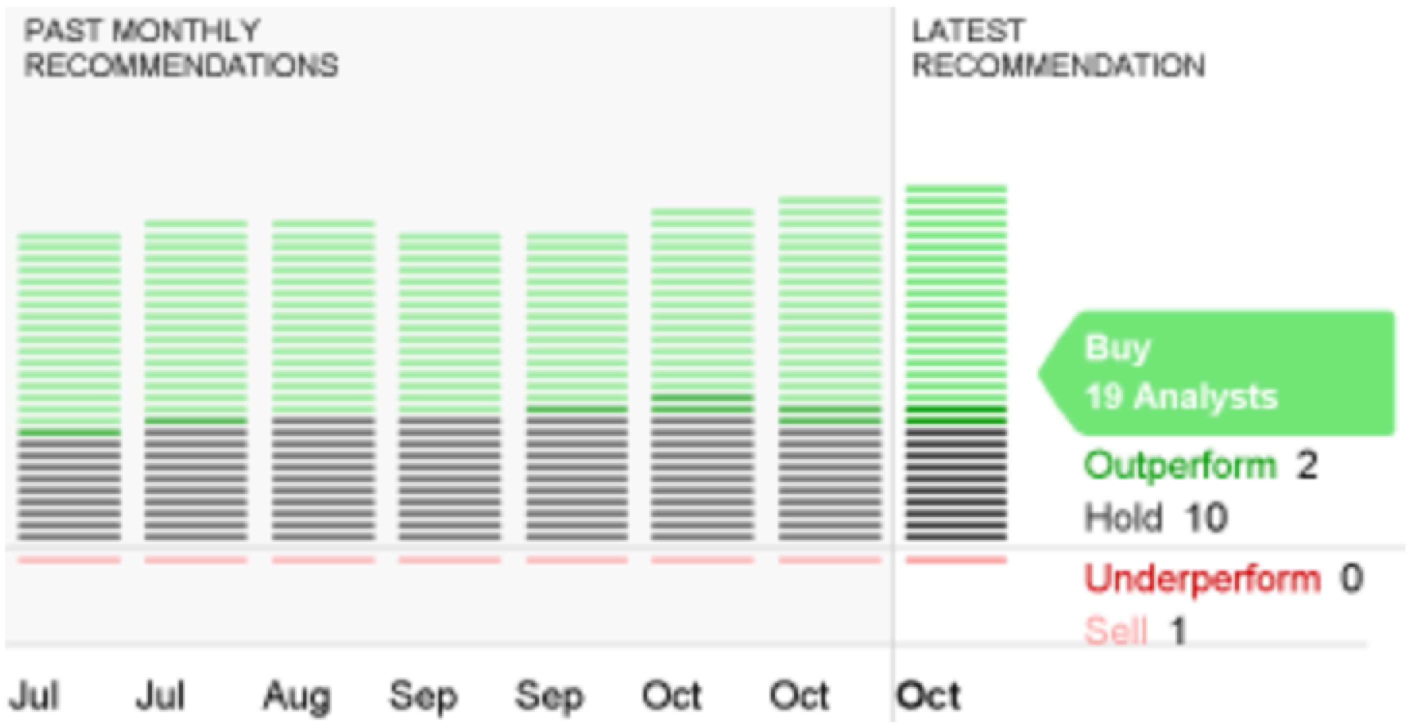
Novo Nordisk's notable outperformance of the S&P 500 this year could, in part, be explained by its 1,51 beta. This higher volatility relative to the market may have worked in Warner Bros' favor during favorable market fluctuations, helping the company to preserve its value and even grow, whereas others might have suffered losses..

ANALYST RECOMMENDATIONS

Analyst Recommendations

The current consensus among 32 polled investment analysts is to **buy** stock in Warner Bros Discovery Inc. This rating has held steady since October, when it was unchanged from a buy rating.

Move your mouse over past months for detail



Most analysts are telling us to buy in this market configuration:

- 19 analysts tell us to long
- 10 analysts tell us to hold
- 1 analysts tell us to sell

This analysis has not changed for several months, but we can see that more and more analysts are telling us to buy. **This shows a buying trend.**

Don't forget that for our sraddle strategy, the direction doesn't really matter, but it could be the harbinger of a big move.

HOT NEWS

ARTICLE

The Investing.com article reports that the movie "Barbie," distributed by Warner Bros. Discovery, has achieved an incredible one billion dollars in global revenue just 17 days after its release. The film, directed by Greta Gerwig and starring Margot Robbie and Ryan Gosling as Barbie and Ken, respectively, earned $459.4 million in North America and $572.1 million in international markets. This remarkable achievement made Greta Gerwig the first woman to direct a film surpassing the billion-dollar revenue mark.

Warner Bros. executives Jeff Goldstein and Andrew Cripps expressed their astonishment at the film's success, which exceeded their most optimistic projections. "Barbie" benefited from a significant promotional campaign and online buzz, partly related to Christopher Nolan's biopic "Oppenheimer." The movie is the sixth to cross the billion-dollar mark at the box office since the beginning of the pandemic, also ranking as the second most profitable film of the year so far, just behind Universal and Illumination's "The Super Mario Bros. Movie."

The publication of these results is likely to be surprising due to the film's rapid and massive success, surpassing both audience and industry expectations. The movie's exceptional performance demonstrates how it has captivated audiences worldwide, which can be considered a positive surprise for the film industry and Warner Bros. Discovery investors.

STRATEGY

WHY HAVE YOU CHOSEN THIS OPTION STRATEGY?

Our decision to invest $10,000 in a Warner Bros straddle was based on a thorough **analysis of financial data and current market trends.** We considered several **key factors** in making our investment decision.

Earnings announcement: Warner Bros will release its results on Wednesday 8 November. When results are released, volatility increases and the price tends to fluctuate widely. Aware of this, we have opted for a straddle to bet on high volatility when the results are published. We are neither bearish nor bullish, we simply believe that the market will soon react significantly.

A **straddle** is an options strategy involving the simultaneous purchase of a call and a put on the same underlying asset with the same strike price and expiry date. In this case, by investing in a straddle, we seek to profit from significant movements in the price of Warner Bros. shares, regardless of the direction in which the market moves following the publication of the results.

By anticipating increased volatility following the results announcement, the straddle allows us to take advantage of significant price movements, whether upwards or downwards. We are positioned to benefit from the immediate and potentially significant impact that Warner Bros.' financial results will have on the stock market.

It is important to note that the choice of a straddle demonstrates our **confidence** in our **ability** to anticipate market volatility and take action accordingly to **maximise our potential gains,** regardless of the direction in which the market moves following the release of Warner Bros results.

MOVING AVERAGE AND BOLLINGER BANDS

Moving averages (MAs) are key indicators used to identify trends and levels of support or resistance for a stock. For Warner Bros Inc:

- MA10: With a value of 10.2, it is below the current share price of 11.77, suggesting short-term bullish momentum.

Bollinger Bands (BBands):

- Upper Band: At 11.46, this is just below Warner Bros Inc's current share price, which could indicate a potentially overbought level where the price could encounter resistance.
- Middle band: At 10.39, this is close to the MA10 and could act as a short-term indicator of price direction.
- Lower band: At 9.33, if the price approaches this value, it could indicate that the stock is in oversold condition and could soon rebound.

In summary, the current position of the MA10s above the share price and the BBands with the upper band just below the current price suggest that Warner Bros Inc could be about to encounter short-term resistance. This could lead to consolidation or a slight pullback before a continuation of the uptrend, given the strong uptrend suggested by a high MA10 relative to the current share price.

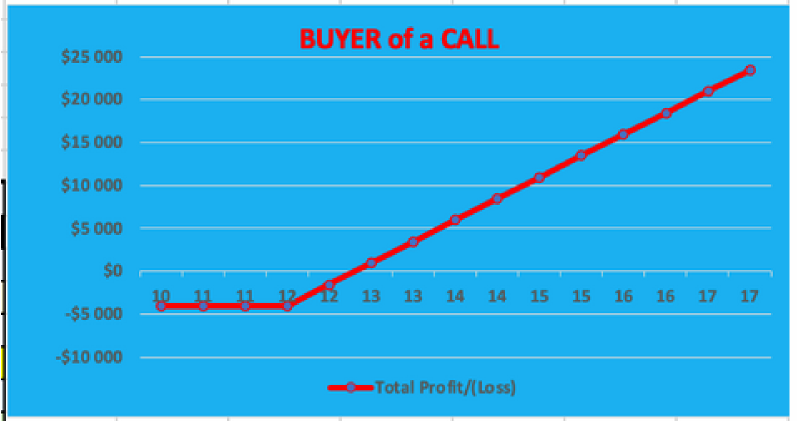
RSI

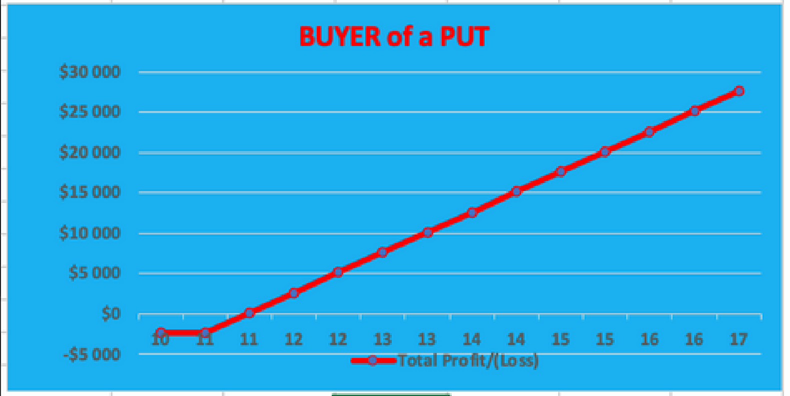
The RSI, or relative strength index, is a technical indicator that measures the speed and direction of a price movement to determine whether an asset is overbought or oversold. When the RSI is above 70, the asset is considered overbought, which may indicate a risk of reversal to the downside. Conversely, an RSI below 30 indicates that the asset is oversold, suggesting a potential turn to the upside. For Warner Bros Inc. shares, the RSI chart shows a value of 65.4498 for the most recent date. This value is below the threshold traditionally considered overbought (70) but well above the neutrality threshold (50), indicating a rather marked uptrend. This value suggests that the share's current momentum is strong without being extreme, being in a relatively bullish zone. Historically, in recent months, Warner Bros Inc's RSI has fluctuated, approaching the overbought level and then stabilizing above the 50 threshold, indicating persistent bullish pressure.

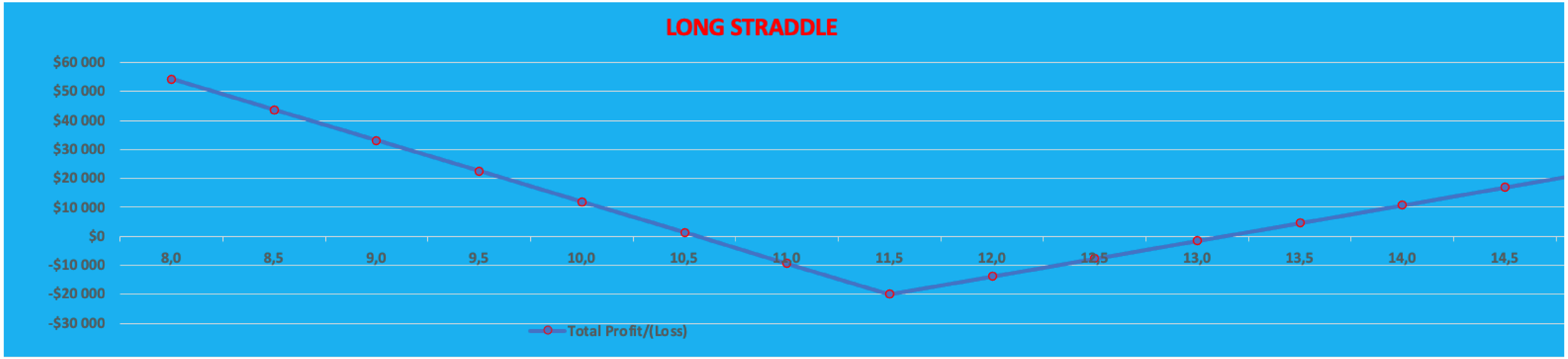
Given the values of the RSI, Moving Averages (MA) and Bollinger Bands (BBands) for Warner Bros Inc, it seems that the stock is showing signs of a possible short-term bullish recovery. The RSI, being well above the neutral zone, suggests that the stock could be correctly valued and ready for an ascent. In addition, the share's position relative to the MAs indicates that it is currently in a consolidation phase after a recent rise, and the BBands show that the share is close to the support level. Combining these elements, it is likely that Warner Bros Inc. shares will experience a short-term upswing.

OPTION CHART

CALL BUYER=LONG CALL															
Share Price	10,00	10,50	11,00	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00
Sell	$10,00	$10,50	$11,00	$11,50	$12,00	$12,50	$13,00	$13,50	$14,00	$14,50	$15,00	$15,50	$16,00	$16,50	$17,00
Buy	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50
GM (Gross margin)	-$1,50	-$1,00	-$0,50	$0,00	$0,50	$1,00	$1,50	$2,00	$2,50	$3,00	$3,50	$4,00	$4,50	$5,00	$5,50
GM adj	$0,0000	$0,0000	$0,0000	$0,0000	$0,5000	$1,0000	$1,5000	$2,0000	$2,5000	$3,0000	$3,5000	$4,0000	$4,5000	$5,0000	$5,5000
-OP	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100	$0,8100
Profit/(Loss)	-$0,8100	-$0,8100	-$0,8100	-$0,8100	-$0,3100	$0,1900	$0,6900	$1,1900	$1,6900	$2,1900	$2,6900	$3,1900	$3,6900	$4,1900	$4,6900
Total Profit/(Loss)	-$9 963,00	-$9 963,00	-$9 963,00	-$9 963,00	-$3 813,00	$2 337,00	$8 487,00	$14 637,00	$20 787,00	$26 937,00	$33 087,00	$39 237,00	$45 387,00	$51 537,00	$57 687,00
What if	$12,00	$11,50	$11,00	$10,50	$10,00	$9,50	$9,00	$8,50	$8,00	$7,50	$7,00	$6,50	$6,00	$5,50	$5,00
PUT BUYER=LONG PUT															
Sell	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50	$11,50
Buy	$12,00	$11,50	$11,00	$10,50	$10,00	$9,50	$9,00	$8,50	$8,00	$7,50	$7,00	$6,50	$6,00	$5,50	$5,00
GM	-$0,5000	$0,0000	$0,5000	$1,0000	$1,5000	$2,0000	$2,5000	$3,0000	$3,5000	$4,0000	$4,5000	$5,0000	$5,5000	$6,0000	$6,5000
GM adj	$0,0000	$0,0000	$0,5000	$1,0000	$1,5000	$2,0000	$2,5000	$3,0000	$3,5000	$4,0000	$4,5000	$5,0000	$5,5000	$6,0000	$6,5000
-OP	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700	$0,4700
Profit/(Loss)	-$0,4700	-$0,4700	$0,0300	$0,5300	$1,0300	$1,5300	$2,0300	$2,5300	$3,0300	$3,5300	$4,0300	$4,5300	$5,0300	$5,5300	$6,0300
Total Profit/(Loss)	-$9 964,00	-$9 964,00	$636,00	$11 236,00	$21 836,00	$32 436,00	$43 036,00	$53 636,00	$64 236,00	$74 836,00	$85 436,00	$96 036,00	$106 636,00	$117 236,00	$127 836,00
TOTAL for STRADDLE	$8,000	$8,500	$9,000	$9,500	$10,000	$10,500	$11,000	$11,500	$12,000	$12,500	$13,000	$13,500	$14,000	$14,500	$15,000
PUT SELLER (Writer)=SHORT PUT															
Sell	$54 273,00	$43 673,00	$33 073,00	$22 473,00	$11 873,00	$1 273,00	-$9 327,00	-$19 927,00	-$13 777,00	-$7 627,00	-$1 477,00	$4 673,00	$10 823,00	$16 973,00	$23 123,00







CALCULATIONS

BREAKEVEN

to calculate the breakeven point, we need to add the strike price to the option price. In our case,
For the Call: $11,5+$0,81. This gives us $12,31.
For the Put : $11,5+$0,47. This gives us $11,03.

Strike Price	**$11,5000**	**$11,5000**	**100**
Option Price	**$0,8100**	**$0,4700**	
Breakeven	**$12,3100**	**$11,0300**	
Number of Contracts	**123**	**212**	83,75

NUMBER OF CONTRACTS

Our maximum purchase amount is $10,000. So to find out the total number of contracts we can buy, we do investment amount/(option price*number of contract): 84. So we can buy 84 Warner Straddle option contracts.

NO CHANGE IN STOCK PRICE

Stock Market performance: 0%
ROI: 0%

Option performance: -$10 000
ROI: -100%

STOCK PRICE RAISE BY $3

Stock Market performance: +26%
ROI: +26%

Option performance: $16976/2=8488
ROI: 84,88%

STOCK PRICE FALL BY $3

Stock Market performance: -26%
ROI: -26%

Option performance: $43673/2=21836
ROI: 118%

STOCKTRAK CONFIRMATION

ACTION	QTY	TYPE
Buy	84	Market

SYMBOL	PRICE	SECURITY
WBD2317K11.5	$-68.04	Option

ACTION	QTY	TYPE
Buy	84	Market

SYMBOL	PRICE	SECURITY
WBD2317W11.5	$-39.48	Option

TRADE NOTES

Add a note about this trade...

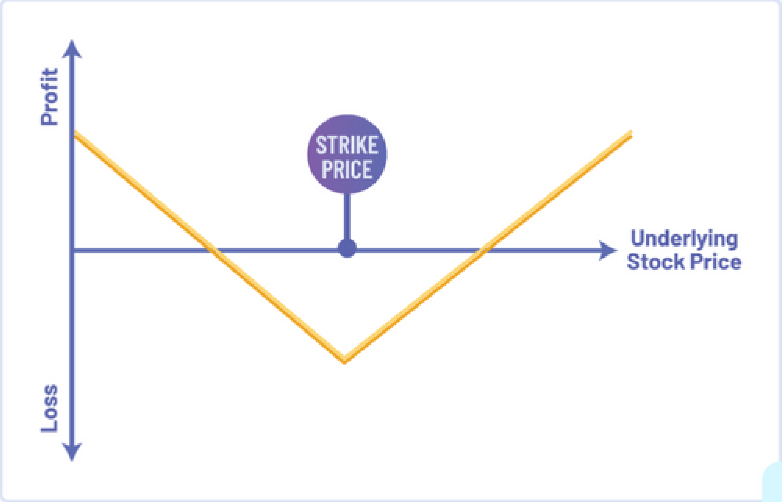
View Example

Estimated Cost + Commission

$10,352.00

A Long Straddle is an option spread type with 2 legs – a long call and long put with the same strike price, which should be near the stock's current price. This is used when you think a stock's price is about to make a big move either up or down, but not sure which (usually triggered by a major news event on the horizon). Since both the call and put are long options, the risk is limited to just the purchase price of the options. The investor takes a loss if the stock's price remains stable.

Option Payout Diagram



ORDER DATE	ORDER	SYMBOL	QTY	ORDER PRICE	TRADE PRICE	TYPE	CURRENCY	STATUS	EXP. DATE
11/05/2023 **Cancel**	Market-Buy	**WBD2317K11.5**	84	MKT	Open	Options	USD	Open	GTC
11/05/2023 **Cancel**	Market-Buy	**WBD2317W11.5**	84	MKT	Open	Options	USD	Open	GTC