TUNIS BUSINESS SCHOOL
UNIVERSITY OF TUNIS

Financial Markets' Project Report

Submitted By:

Karim Hentati (BA/FIN)

Rim Tlili (FIN/ACCT)

Sara Hbaieb (FIN/BA)

Wiem Brini (FIN/ACCT)

Group 16

1.Choice of the broker:

In the process of broker selection, AFC emerged as the preferred choice due to its commitment toupholding the ethical and professional standards endorsed by the CFA Institute. Additionally, during our fee negotiation discussions with AFC, we reached a consensus on a brokeragefee of **1 basis point.** This mutually agreed-upon fee structure reflects a balanced and equitable arrangement, contributing to the overall transparency and fairness of our partnership with AFC. We believe that this choice aligns well with the objectives of our project, ensuring a sound and principled foundation for our financial activities.

2.Selection of 20 stocks:

2.1. Macroeconomic Analysis :

To choose the 20 stocks that we will focus on in the TSE, we followed the top-down approach, which involves analyzing macroeconomic factors. In the first step, we conducted a macroeconomic factors analysis, which is as follows:

Macroeconomic Factors Analysis:

1. GDP:

Tunisia's economy faced challenges in the third quarter of 2023, with a contraction of 0.2% YoY, reversing the 0.6% growth in the previous period. The decline was due to a decrease in the agricultural sector (-16.4%), mining (-8%), and oil refining (-41.5%).

2. Inflation and Monetary Policy:

The Consumer Price Index (CPI) reached its highest value since 1962, standing at 169.4 in October 2023. Annual inflation eased to 8.6% in October, down from 9% in the prior month. The central bank maintained the key interest rate at 8% in October, citing a downward trend in inflation since March.

Based on this analysis, we identified the most profitable sectors, which are:

1. Financial:

With a maintained 8% interest rate and a focus on reducing inflation, financial services, particularly banking, could benefit from higher interest income.

2. Consumer Staples:

In a challenging economic environment, consumer staples remain resilient. Investment in sectors related to essential goods production may provide stability and consistent demand.

The rest of our investment will be divided between these five sectors based on the rest of the analysis:

3. Healthcare

4. Technology

5. Energy

6. Industrials

7.Basic Materials

In the second step, we computed the ROE & ROIC ratios for all companies in the chosen sectors and then calculated the average ratios for each sector. Using those, we identified the most profitable sectors & companies within each sector.

Ranking based on ROIC per sector	
Energy	**31.44%**
Leasing	18.86%
Consumer services	17.23%
Health	12.93%
Consumer Goods	11.33%
Basic Materials	10.72%
Tech	8.96%
Industrial	4.27%
Insurance	4.13%
Telecommunication	2.41%
Banks	1.28%

Ranking based on ROE per sector	
consumer goods	21.68%
Consumer Services	20.55%
Basic materials	19.58%
Energy	16.67%
Insurance	12.89%
health	12.15%
leasing	10.42%
banks	10.07%
Tech	9.70%
industrial	-1.66%
Telecommunication	-2.79%

Based on the ROE and ROIC ranks ,and the macroeconomic factors :

- Consumer Goods, Consumer Services, Basic Materials, and Energy appear strong in both ROE and ROIC rankings.
- The financial sector (Banks) could benefit from the maintained 8% interest rate.
- The industrial and telecommunication sectors show negative ROE, which may indicate challenges

 Allocate a significant portion to **Consumer Goods**, **Consumer Services**, and **Basic Materials** due to their high ROE

 Allocate a significant portion to **Financial sector (Insurance, Leasing, Banks)** due to its positive ROE and its profitability according to the macroeconomic factors.

 Allocate a significant portion to **Energy** given its top ranking in both ROE and ROIC.

 Allocate the rest to Health and Technology for diversification purposes.

The final step is to choose the best stocks from each sector :

Here is a list of the best 5 in each sector :

Banks:

1. **Attijari (Attijari Bank):**
    - ROE: 20.04%
    - ROIC: 2.35%
2. **BIAT (Banque Internationale Arabe de Tunisie):**

- ROE: 14.09%
- ROIC: 2.12%

3. **UIB (Union Internationale de Banques):**
   - ROE: 15.22%
   - ROIC: 1.75%
4. **BT (Banque de Tunisie):**
   - ROE: 11.87%
   - ROIC: 2.21%
5. **UBCI (Union Bancaire pour le Commerce et l'Industrie):**
   - ROE: 10.94%
   - ROIC: 1.58%

- we chose 3 stocks which are ATTIJARI ,UIB ,and BT.
- BIAT is 50% of our capital so we could not chose it .

Insurance:

1. **ASTREE :**
   - ROE: 17.96%
   - ROIC: 4.74%
2. **BHASS:**
   - ROE: 15.71%
   - ROIC: 5.28%
3. **Maghrebia Assurances Vie:**
   - ROE: 15.56%
   - ROIC: 4.16%

4. **Maghrebia Assurances:**
    - ROE: 14.91%
    - ROIC: 4.37%
5. **Tunis Re:**
    - ROE: 7.35%
    - ROIC: 4.11%

□ We chose 2 insurance stocks which are **Maghrebia Assurances Vie** and **Tunis Re.**

□ Due to money constraints we did not choose **ASTREE, Maghrebia Assurances, and BHASS.**

Leasing:

1. **SPDIT-SICAF:**
    - ROE: 29.96%
    - ROIC: 129.63%
2. **ATL (ATL Leasing):**
    - ROE: 8.56%
    - ROIC: 6.11%
3. **Attijari Leasing:**
    - ROE: 9.44%
    - ROIC: 6.80%
4. **CIL (Compagnie Internationale de Leasing):**
    - ROE: 14.63%
    - ROIC: 2.56%
5. **Best Lease:**

- ROE: 9.68%
- ROIC: 2.47%

- We chose 2 leasing stocks which are **SPDIT-SICAF** and **Attijari Leasing** (since it has better ROIC than ATL).

Consumer Goods:

1. **Euro-Cycle:**
   - ROE: 31.45%
   - ROIC: 23.19%
2. **Delice Holding:**
   - ROE: 23.08%
   - ROIC: 13.88%
3. **SFBT (Société Frigorifique et Brasserie de Tunis):**
   - ROE: 21.53%
   - ROIC: 23.06%
4. **Meuble Interieur:**
   - ROE: 18.11%
   - ROIC: 15.02%
5. **New Body Line:**
   - ROE: 13.82%
   - ROIC: 29.18%

- We chose **Euro-Cycle, SFBT, Meuble Interieur, and New Body Line (delice holding has lower ROIC than SFBT, Meuble interieur, and New body line)**

Consumer Services:

1. **City Cars:**

- ROE: 38.07%
- ROIC: 49.96%

2. **Artes:**
    - ROE: 16.89%
    - ROIC: 40.60%
3. **Sotumag:**
    - ROE: 17.66%
    - ROIC: 21.13%
4. **Ennakl:**
    - ROE: 16.22%
    - ROIC: 14.77%
5. **UADH:**
    - ROE: 15.21%
    - ROIC: 6.58%

□ We chose **City Cars, Artes, Sotumag, and Ennakl .**

Basic Materials:

1. **Air Liquide:**
    - ROE: 22.50%
    - ROIC: 18.42%
2. **Sotipapier:**

- ROE: 22.85%
- ROIC: 22.04%

3. **TPR:**

- ROE: 16.99%
- ROIC: 14.99%

4. **ICF (Industrie Chimique de la Soukra):**

- ROE: 15.99%
- ROIC: 11.88%

□ We chose **Sotipapier and TPR (we did not choose air liquide because of money constraint).**

Health:

1. **Unimed:**

- ROE: 12.15%
- ROIC: 12.93%

Energy:

1. **Sotrapil:**

- ROE: 16.67%
- ROIC: 31.44%

TECH:

Telnet :

- ROE: 22.54%
- ROIC: 25.09%

Final list of stocks chosen :

	COMPANY NAME
consumer goods	SFBT
	meuble interieur
	euro cycle
	new body line
consumer services	city cars
	artes
	sotumag
	ennakl
leasing	spidit sicaf
	attijari lease
basic mat	TPR
	sotepapier
HEALTH	unimed
TECH	telnet
insurance	tunis re
	maghrebia ass vie
Energy	SOTRAPIL
banks	bt
	Uib
	attijari

3.Selection of 10 stocks: FINANCIAL STATEMENT ANALYSIS

In undertaking a comprehensive evaluation of the selected 20 stocks, our approach centers on conducting a thorough **fundamental analysis**.Our analytical strategy involves a meticulous dissection of each company's financial health through an in-depth examination of their **balance sheet**, **income statement**, and **cash flow statement.** In particular, we focused on key financial metrics to gauge profitability and liquidity. Profitability ratios, including gross, net, and operating profit margins, provided insights into the companies' operational efficiency and overall financial performance. Concurrently, we delved into liquidity ratios, scrutinizing both current and quick ratios, to assess short-term financial health. Solvency considerations were paramount, with a keen eye on the Debt-to-Equity (D/E) ratio to evaluate the companies' long-term financial stability.

After that, we benchmarked each company against its counterparts within the same sector, comparing essential indicators such as earnings per share (EPS), return on equity (ROE), operating margin, current ratio, and D/E ratio. This comparative approach allowed us to identify companies exhibiting not only robust liquidity and solvency positions but also superior profitability relative to their industry peers. The result was a strategic selection of stocks characterized by a well-rounded financial profile, aligning with our overarching goal of optimizing the portfolio for sustained and resilient market performance.

1.Consumer services:

based on the profitability charts , city cars has the best values but in recent years it is declining or constant . although ennakl ans sotumag have smaller values compared to their industry peers they are showing a strongincrease in recent years .On liquidity side all companies are able to cover their short term liabilities with their short term assets (ratios >1) , sotumag , artes and city cars have the highest values but they are declining while ennakl is increasing in recent years.solvency wise city cars and artes D/E ratios are decreasing which indicates thet the companies are relying more on equity for finanacing rather than debt which is less risky while ennakl d/e ratio is increasing which is riskier . all in all we chose ennakl and sotumag

1.Consumer Goods:

Notably, all companies exhibit a favorable current ratio above 1 over the past few years, indicating their ability to meet short-term obligations, a positive indicator for liquidity. However, a red flag is raised by New Body Line (NBL), which witnessed a substantial decline in its current ratio from 8.4 to 4.4 in the last yeardue to an increase in total current liabilities, signaling a potential liquidity strain.

Turning our attention to profitability, Euro Cycle shows a decreasing trend in both Return on Equity (ROE) and operating profit margin. Conversely, SAM and SFBT maintain a stable performance with constant ROE and operating profit margins over the last two years, positioning them as resilient players in terms of sustained profitability. Meanwhile, NBL exhibits an improvement in ROE and operating profit margin in the last year, showcasing a positive trajectory.

Solvency considerations reveal a critical distinction. SFBT and SAM exhibit a favorable trend with decreasing Debt-to-Equity (D/E) ratios, indicating a prudent financing approach with more equity than debt. This bodes well for risk management. On the contrary, Euro Cycle showcases an alarming increase in D/E ratio without an equivalent improvement in profit margins, signaling potential solvency challenges.

In light of these analyses, Euro Cycle is excluded from our final selection due to its concerning solvency and profitability indicators. The stocks of **SFBT** and **SAM** emerge as the preferred choices, underscored by their consistent profitability, improving solvency positions, and prudent risk management practices.

3.Basic Materials :

In comparing STPAP and TPR, a nuanced analysis of their liquidity, profitability, and solvency positions directs our decision-making process. Despite both companies maintaining current ratios above 1, indicating good short-term liquidity, STPAP stands out with a higher current ratio than TPR. However, TPR compensates with a higher quick ratio, reflecting its ability to cover immediate obligations with its mostliquid assets more effectively than STPAP.

Delving into profitability, STPAP demonstrates a superior performance, boasting higher values than TPR. This is particularly evident in metrics such as return on equity (ROE) and other profitability indicators. On the solvency front, both companies show a slight increase in their Debt-to-Equity (D/E) ratios over time,primarily due to growing liabilities. However, TPR exhibits a higher D/E ratio, suggesting a comparatively riskier financial structure as it relies more on leverage to finance its operations.

In light of these analyses, STPAP emerges as the more favorable choice. Its superior current ratio and overall better profitability position make it a more resilient and financially robust option. Furthermore, STPAP's lower D/E ratio implies a more conservative approach to financing, mitigating potential risks associated with excessive leverage. Therefore, our strategic decision to choose STPAP over TPR is underpinned by its stronger liquidity, superior profitability, and a more conservative approach to financial leverage, aligning with our objective of constructing a portfolio poised for sustainable and stable market performance.

4.Leasing :

In comparing SPDIT and Attijari Leasing within the leasing sector, an insightful examination of liquidity, profitability, and earnings per share (EPS) trends guides our decision-making process. SPDIT initially exhibits a considerably higher average liquidity ratio compared to Attijari Leasing, signifying a robust short-term financial position. However, it's noteworthy that these ratios are converging, with SPDIT's liquidity ratios experiencing a decline while remaining higher than those of Attijari Leasing, which are on the rise.

Turning our attention to profitability, SPDIT stands out with markedly higher indicators than Attijari Leasing. Despite this, Attijari Leasing's EPS consistently surpasses SPDIT's, and the trend is upward, indicating a consistent improvement in earnings per share over time.

Given these observations, the strategic choice of SPDIT in the leasing sector is justified. While liquidity ratios for both companies are converging, SPDIT maintains a superior and currently higher position, providing a cushion against short-term financial challenges. Additionally, the higher profitability indicators of SPDIT underscore its ability to generate strong returns. However, the decision to choose SPDIT is nuanced by recognizing that Attijari Leasing exhibits a consistent improvement in EPS, suggesting a positive trajectory in earnings growth. Therefore, the selection of SPDIT is grounded in its current liquidity advantage and superior profitability,

5.Health:

In evaluating Umed in the health sector, a detailed analysis of its profitability, liquidity, and solvency positions steers our decision-making process. Despite witnessing a decrease in Return on Equity (ROE) over the years, there is a notable turnaround in the last year, with ROE surging from 7.52% in 2022 to 13.73% in 2023. This positive trend is mirrored in all margin indicators, signaling a favorable development in the company's profitability.

However, the liquidity aspect raises concerns, as both liquidity ratios have experienced a decline over the years, and the quick ratio is now below 1. This indicates a potential challenge in meeting short-term obligations, suggesting a less than ideal liquidity position.

The most significant factor influencing the decision not to choose Umed lies in its solvency metrics. The Debt-to-Equity (D/E) ratio has shown a substantial increase in the last two years, jumping from 25% to 53%. This significant rise indicates a high reliance on debt for financing operations. While this increase is in tandem with growth ratios, it introduces a considerable level of risk, as the company is increasingly leveraging debt to fund its activities.

In summary, the decision not to choose Umed in the health sector is primarily driven by concerns related to liquidity and a high and increasing level of debt, which adds significant risk to the company's financial structure. While positive developments in profitability are acknowledged, the overall risk profile, especially in terms of liquidity and solvency, led to the strategic decision to opt for alternative options that offer a more balanced and resilient financial position.

6.Tech

In evaluating TELNET within the technology sector, a detailed analysis of its liquidity, profitability, and solvency positions informs our decision-making process. The liquidity indicators present a mixed picture, as both current and quick ratios are above 1, suggesting the company's ability to cover short-term obligations with short-term assets. However, a concerning trend emerges as these ratios have been decreasing in recent years. This decline is attributed to a notable increase in total current liabilities, rising from 19.1 in 2020 to 28.9 in 2023, potentially signaling challenges in managing short-term financial obligations.

Turning to profitability, TELNET faces challenges, with a drastic decrease in gross profit margin in 2020 due to increasing costs of revenues outpacing revenue growth. The other two margin indicators have been fluctuating and decreasing since 2021, indicating challenges in maintaining profitability. Despite an increase in Return on Equity (ROE) since the previous year, the overall profitability outlook for the company appears to be less favorable.

On the solvency front, the Debt-to-Equity (D/E) ratio is decreasing, which is generally considered a positive sign as it indicates a shift toward relying more on equity than debt to finance activities. However, despite this positive aspect, the overall financial health of the company raises concerns, especially in terms of profitability and liquidity.

In summary, the decision not to choose TELNET in the technology sector is grounded in the company's challenging financial health. While there are positive signs in solvency with the decreasing D/E ratio, the declining liquidity and profitability trends overshadow these positives. The strategic decision to explore alternative options is driven by the need for a more robust and balanced financial profile in the dynamic and competitive technology sector.

7.Insurance

In comparing TRE and AMV within the insurance sector, a comprehensive evaluation of their liquidity and profitability positions guides our decision-making process. In terms of liquidity, TRE has experienced a slight decrease in its current ratio over the last few years, dropping from 0.999 in 2021 to 0.914.
Conversely, AMV exhibits an improvement in its current ratio from 0.476 to 0.617 during the same period, indicating a better short-term financial position.

Turning to profitability, AMV consistently outperforms TRE in terms of Return on Equity (ROE), despite some fluctuations over the years. The higher ROE for AMV suggests more effective utilization of equity to generate returns compared to TRE. Additionally, while there have been fluctuations, AMV's net profit margin (NPM) during the last year is comparable to TRE's, indicating a competitive position in terms of generating profits relative to revenue.

The strategic decision to choose AMV over TRE in the insurance sector is rooted in its superior liquidity position and consistently higher profitability, as evidenced by the remarkable ROE performance. While acknowledging some fluctuations, AMV's overall profitability remains stronger, making it a more attractive choice for investment. The consideration of both liquidity and profitability aligns with our goal of selecting companies with a well-rounded financial profile, poised for sustained success in the insurance sector.

8.Banks

Examining liquidity, it's observed that all banks are experiencing an increasing trend in cash ratios; however, the values do not surpass 0.1, reflecting a suboptimal liquidity position across the sector. Notably, Attijari exhibits the best cash ratio for 2023, positioning it relatively favorably in terms of liquidity.

Considering solvency, a concerning trend emerges as all banks display a decreasing trajectory. While BTand UIB have a relatively balanced use of debt and equity, Attijari's reliance on debt reaches 100% in 2023, signaling a high level of risk associated with its financing structure.

In terms of profitability, both Return on Equity (ROE) and Earnings Per Share (EPS) are on the rise for all banks, with Attijari and UIB leading with the highest values. This upward trajectory in profitability metrics positions Attijari and UIB as attractive choices within the banking sector.

The strategic decision to choose Attijari and UIB in the banking sector is grounded in a balanced consideration of liquidity, solvency, and profitability. Attijari's superior cash ratio, coupled with robust profitability metrics, makes it a standout choice. UIB, with a prudent use of debt and strong profitability, aligns with our goal of selecting banks with a resilient and balanced financial profile. This strategic approach ensures a comprehensive evaluation of each bank's financial health, optimizing the portfolio for sustained and stable performance in the dynamic banking industry.

9.Energy:

In the evaluation of Sotrapil’s stock within the energy sector, the company consistently demonstrates ahigh level of profitability, with gross profit margin values ranging from 91.60% to 94.04%. This indicates a commendable efficiency in managing production costs and generating profits. Moreover, the net profit margin values, ranging from 28.57% to 60.48%, portray a positive trend, reaching a peakin 2023. This upward trajectory suggests an effective management strategy in controlling operating expenses and enhancing overall profitability. Turning our attention to liquidity, Sotrapil exhibits impressive current and quick ratios ranging from 4.49 to 7.29 and 4.34 to 7.24, respectively, over theyears. These values signify a substantial buffer of current assets, showcasing the company's ability tocover short-term liabilities efficiently. The robust liquidity position, coupled with consistently high profitability, positions Sotrapil as a strategic addition to our portfolio, aligning with our objective ofselecting stocks with a strong financial foundation in the energy sector.

List of the 10 stocks chosen:

SFBT	SAM	UIB	TJARI	NAKL	AMV	STPAP	STPIL	SPDIT	MGR

4.Portfolio Optimization :

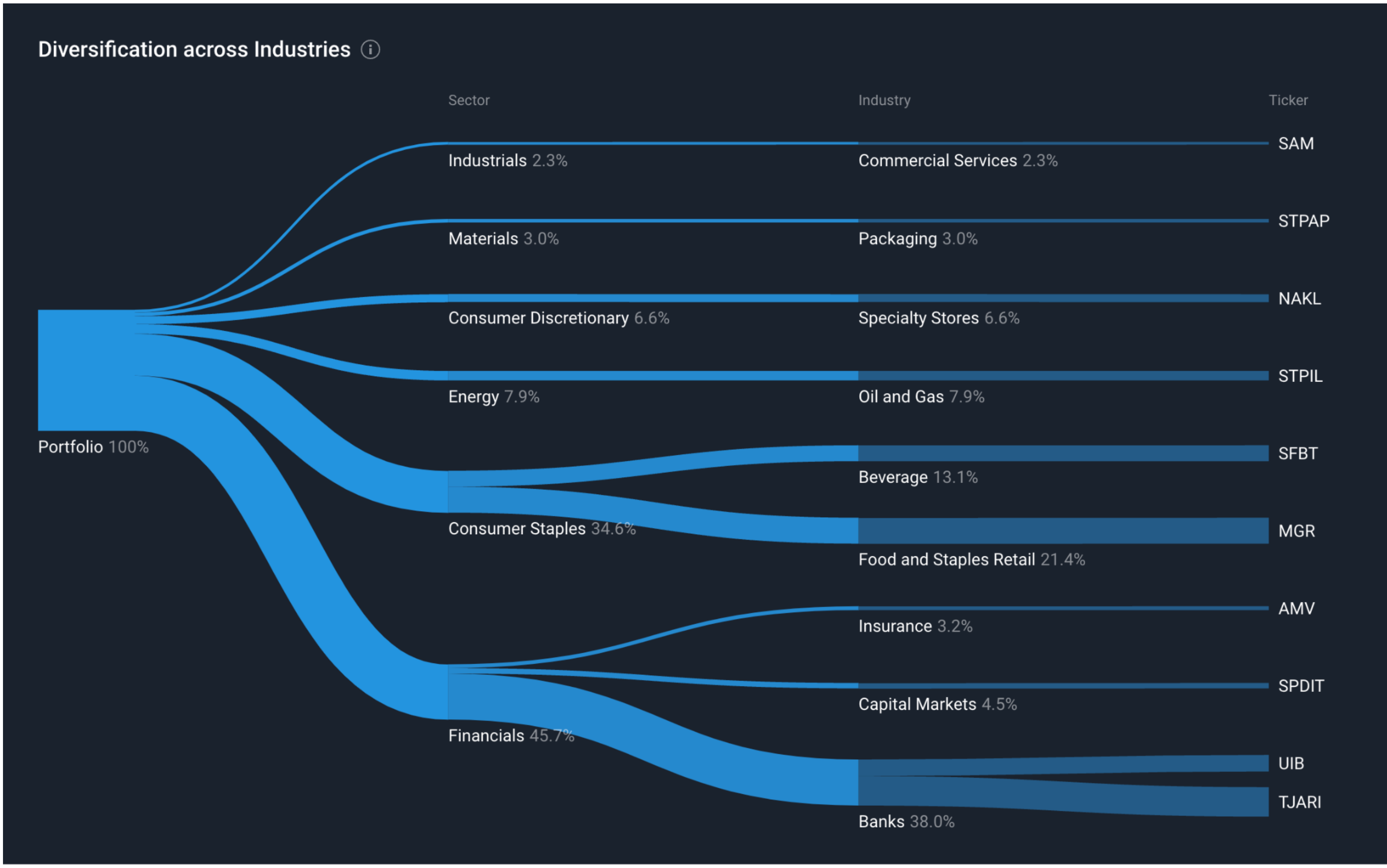
For the portfolio optimization phase, we initially employed the minimization of portfolio variance approach, aiming for a 15% target return. The resulting optimal weights for SFBT, SAM, UIB, TJARI, NAKL, AMV, STPAP, STPIL, SPDIT, and MGR were calculated as **26.08%, 5.15%, 6.36%, 8.78%, 4.93%, 0.00%, 2.62%, 16.87%, 4.33%, and 24.88%**, respectively.

	min σ²(p)	0,000040517691	
	s.t		
Return of our portfolio	15,00%	=	10%
	100,00%	=	1

	SFBT	SAM	UIB	TJARI	NAKL	AMV	STPAP	STPIL	SPDIT	MGR
Return	0,0626%	0,0457%	0,0457%	0,0477%	0,0339%	0,0278%	0,0416%	0,0629%	0,0360%	0,0757%
Weights	26,08%	5,15%	6,36%	8,78%	4,93%	0,00%	2,62%	16,87%	4,33%	24,88%
money to be invested	52,16071064	10,30574495	12,7117121	17,56504913	9,850763052		5,242312735	33,73179012	8,663120482	49,76879678

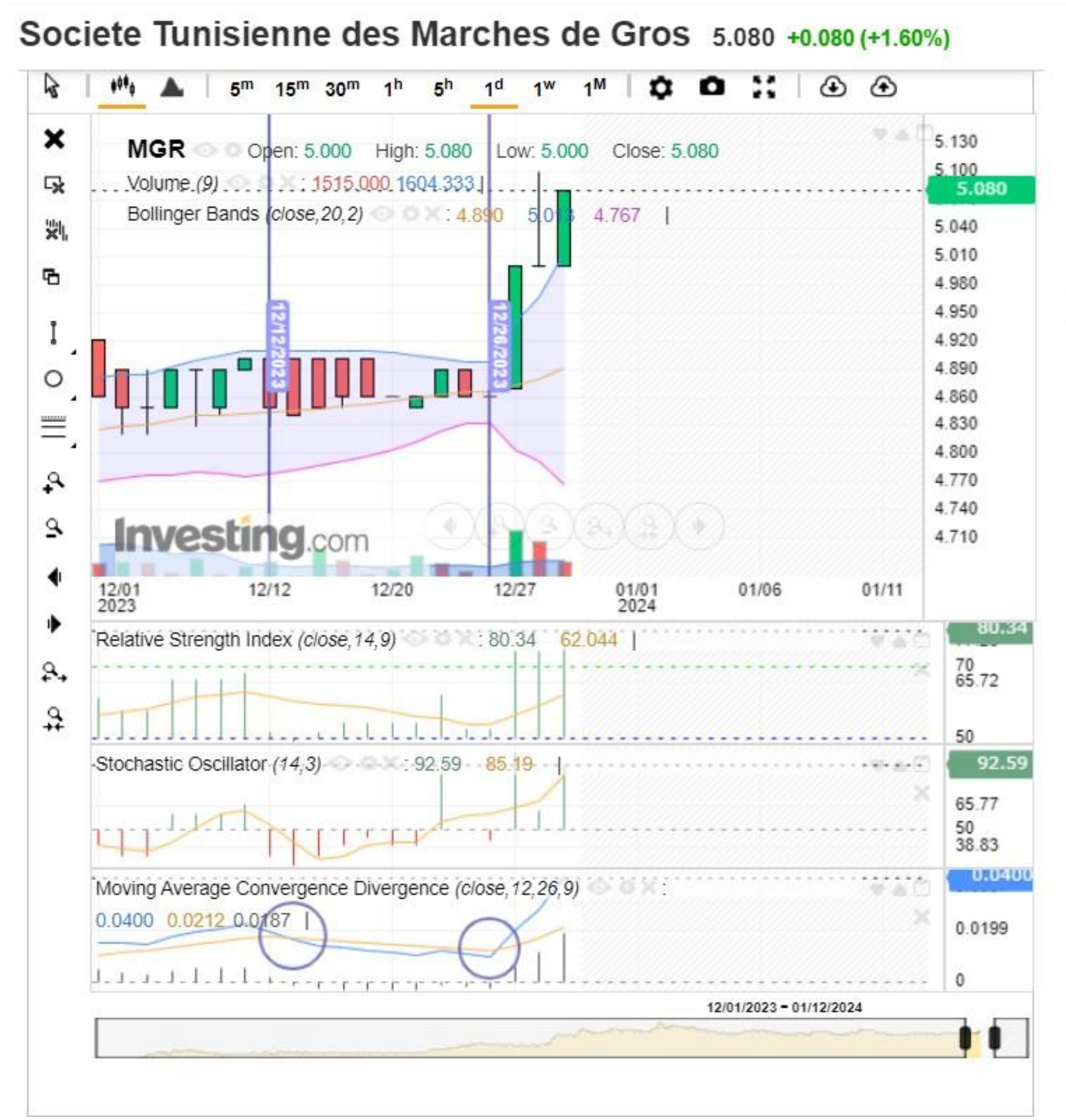
However, faced with a budget constraint, we encountered limitations in acquiring all of the identified stocks. Subsequently, we adapted our strategy by reoptimizing the portfolio using a maximization of the Sharpe ratio. This adjustment allowed us to enhance the risk-adjusted return, and by introducing a minimum weight constraint, we ensured the inclusion of all stocks within our financial capacity. The decision to maximize the Sharpe ratio stemmed from its ability to offer a higher return compared to the initial variance minimization approach, aligningwith our goal of achieving an optimal balance between risk and return in our investment.

	price	12,4	4,5	25,5	44,5	12	6,2	5,56	15	8,86	5
		SFBT	SAM	UIB	TJARI	NAKL	AMV	STPAP	STPIL	SPDIT	MGR
	annual return	15,77%	11,51%	12,026%	17,87%	8,55%	7,01%	10,49%	15,85%	9,08%	19,07%
	standard deviation	18,27%	25,32%	19,765%	19,09%	16,00%	12,11%	25,07%	23,42%	19,51%	23,80%
	min weight	6,20%	2,25%	12,75%	22,25%	6,00%	3,10%	2,78%	7,50%	4,43%	2,50%
	optimal weight	13%	2%	13%	23%	6%	3%	3%	11%	4%	21%
	money to invest	26,52589202	4,5	25,5	46,47410635	12	6,2	5,56	21,71430573	8,86	42,66569591
	quantity to buy	2	1	1	1	1	1	1	1	1	8
	portfolio summary										
expected return	15,25%										
standard deviation	0,09457012261										
rf											
total weight	100%										
sharpe ratio	1,612447624										


Diversification across Industries
Sector
Industry
Ticker
Portfolio 100%
Industrials 2.3%
Commercial Services 2.3%
SAM
Materials 3.0%
Packaging 3.0%
STPAP
Consumer Discretionary 6.6%
Specialty Stores 6.6%
NAKL
Energy 7.9%
Oil and Gas 7.9%
STPIL
Consumer Staples 34.6%
Beverage 13.1%
SFBT
Food and Staples Retail 21.4%
MGR
Financials 45.7%
Insurance 3.2%
AMV
Capital Markets 4.5%
SPDIT
Banks 38.0%
UIB
TJARI

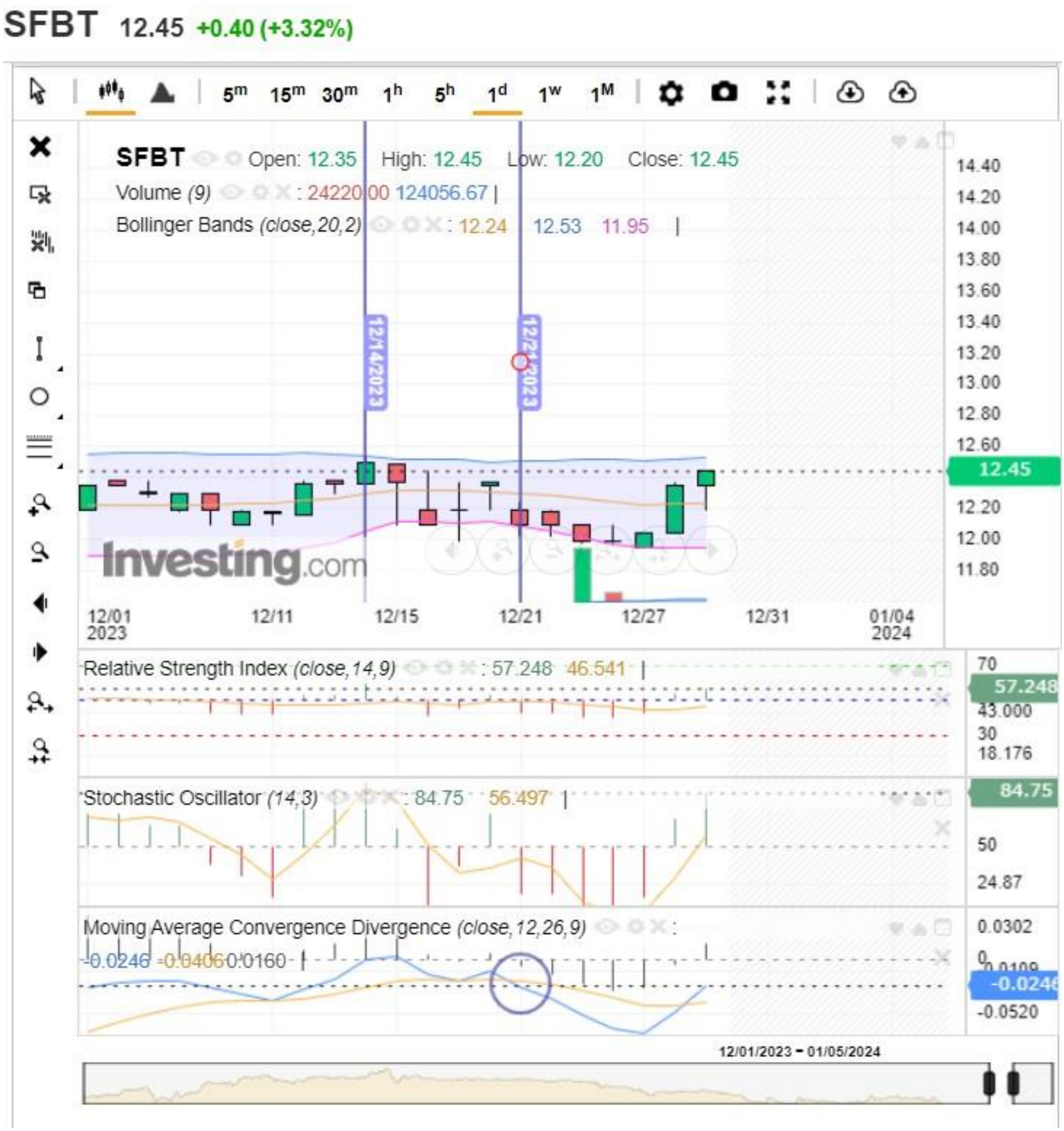
5.Technical analysis :

MGR:



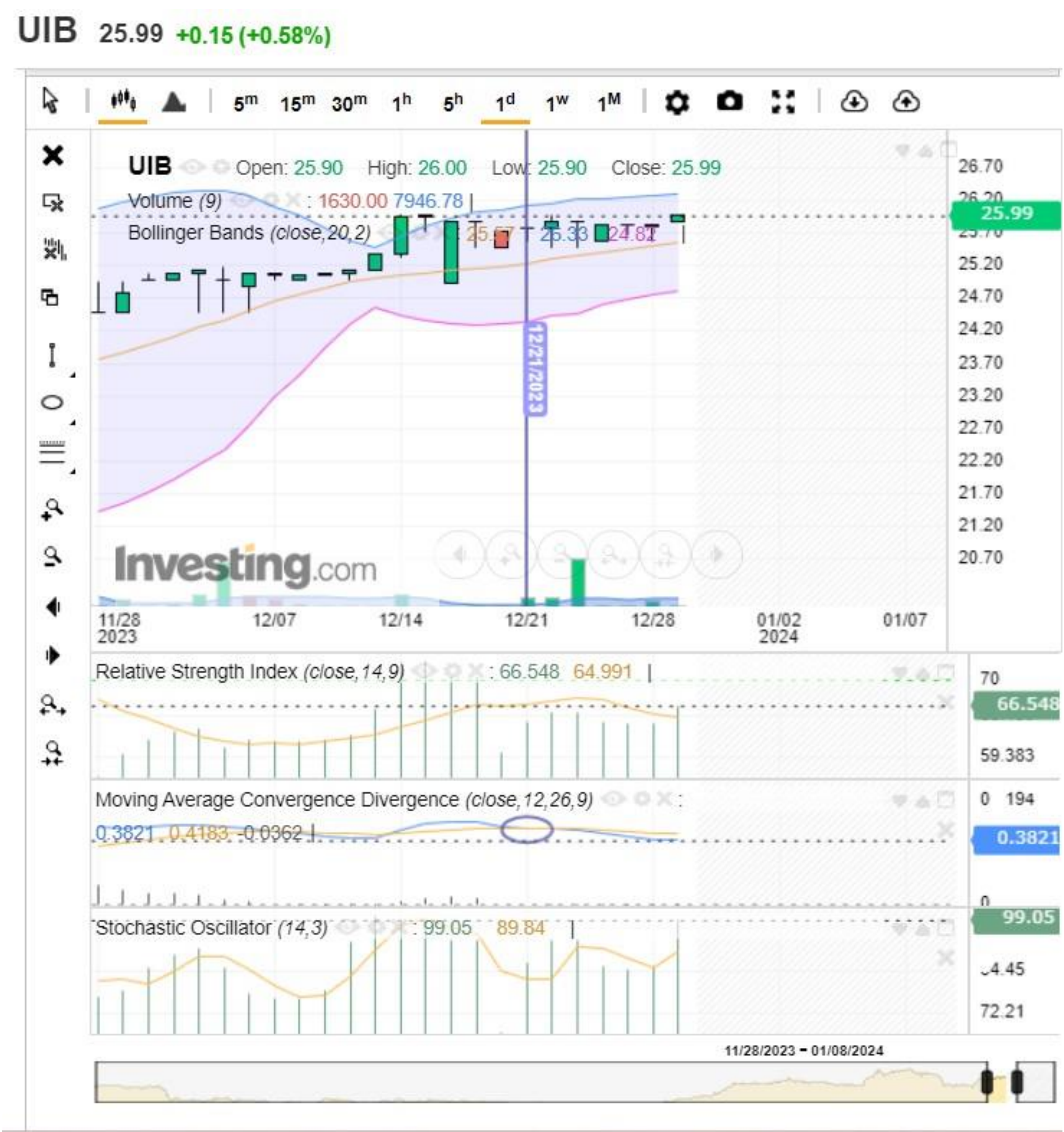
Using the MACD , the MACD line crosses the signal line on December 13th which indicates a buy signal . We chose this as an entry point so we bought 10 MGR stocks for the first time . We held the stocks until we re optimized and had to sell 2 stocks on 21st of december . after that the second crossing over was on the 26th of december according to the MACD but all other signal did not give any sign to sell the stock (RSI below 70, stochastic below 80, bollinger bands below the upper band) and the price was ascending so we did not sell the stock and the price went up by 2.88% (from 4.860 to 5dt). By 29th December we had a %change of 3.23(fees included) and 3.67%(without fees).

SFBT:



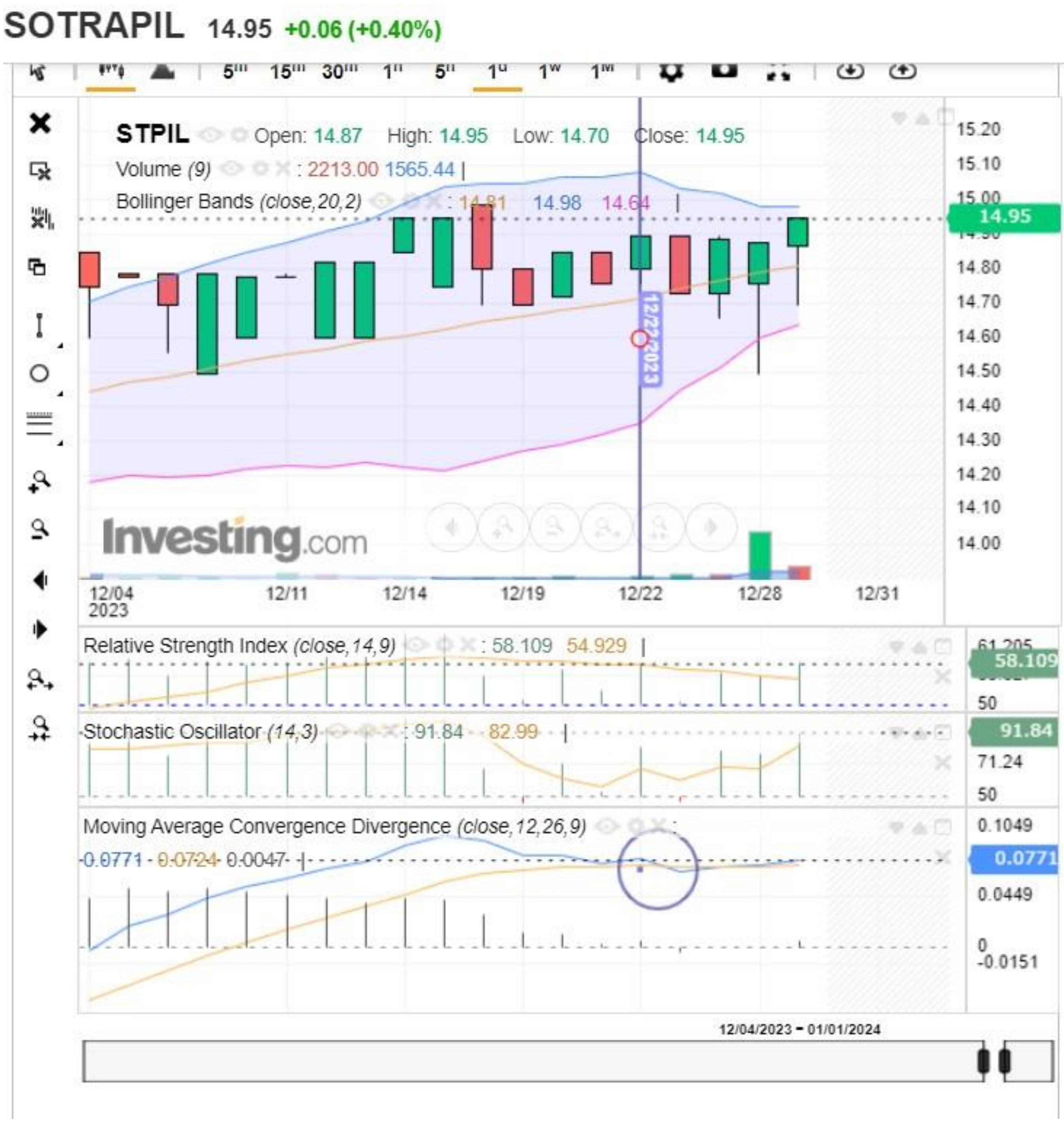
We first bought 4 SFBT stocks on December the 14th .The stochastic oscillator was above 80 indicating that the stock is overbought but no other indicator was confirming that so we bought the stocks . We sold 2 stocks for reoptimization purposes on the 21st of december.We held on to the remaining two stocks until the end, mainly because of the positive investor sentiment. In the first week after buying the stocks, the transaction volume doubled, indicating a belief that SFBT would go up. This was particularly evident as it was the year-end period, with people in a celebratory mood. This uptick in activity reinforced our decision to keep holding onto the stocks. Finally on the 27th of December the stock went up and in 3 days we had a %change of 0.73% (no fees included)and 0.29% ‘fees included).

UIB:



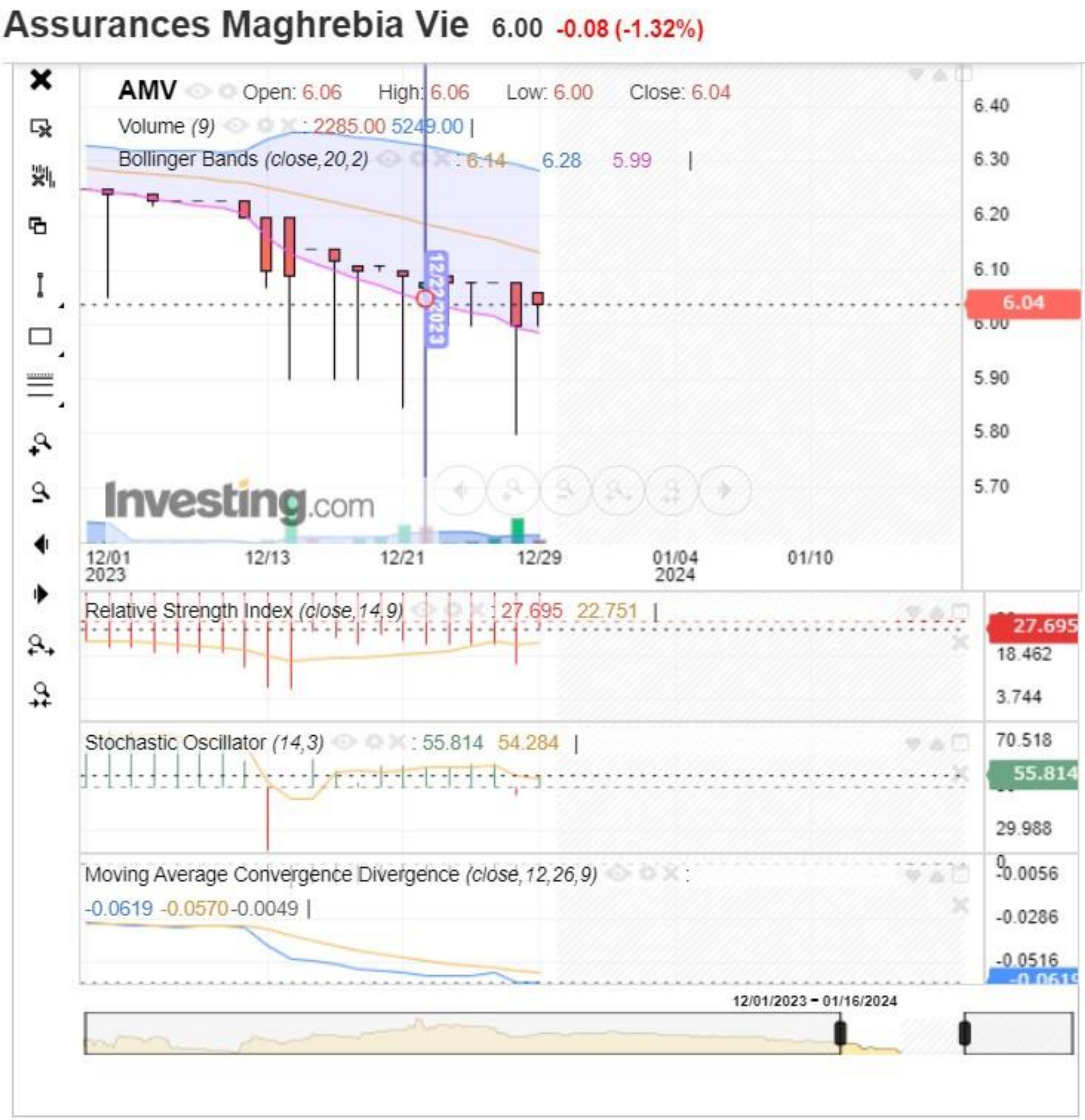
our entry point was on 21st December . on this date the Macd line is above the signal line indicating a buying signal . no other indicators disclose anything .throughout the week no other signal is present so we kept the stock and we ended up with 0.39% change (without fees) and -0.27%(with fees).

SOTRAPIL :



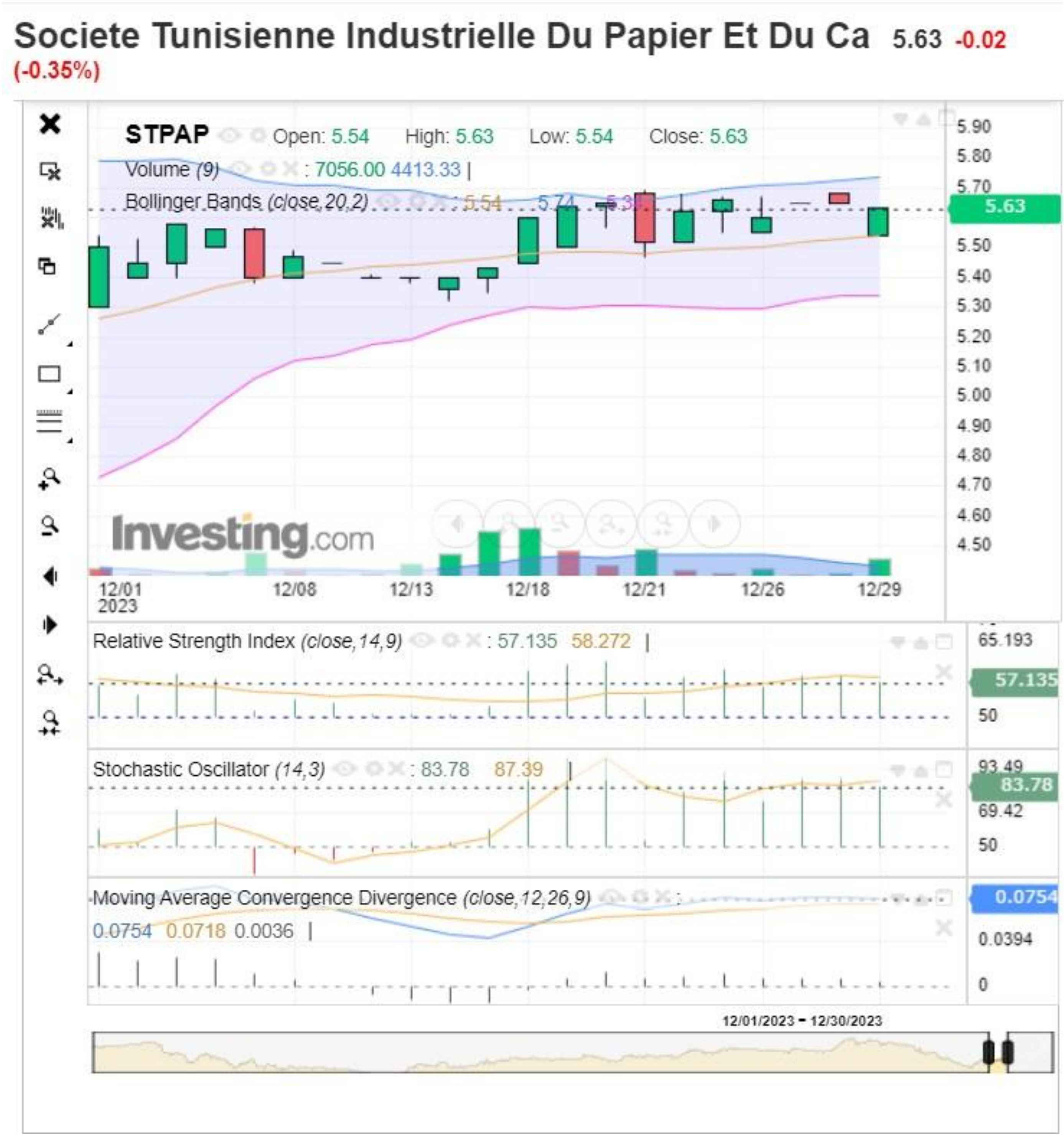
Our entry point was on the 14th of December .Throughout the first week , no indicator has given any signal . we sold one stock on the 22nd for reoptimization purposes .we kept the other stock becaue the MACD line went above the signal line (blue line). By the end of the period we had a percentage change of 0.67% (without fees) and 0.07% (fees included).

AMV:



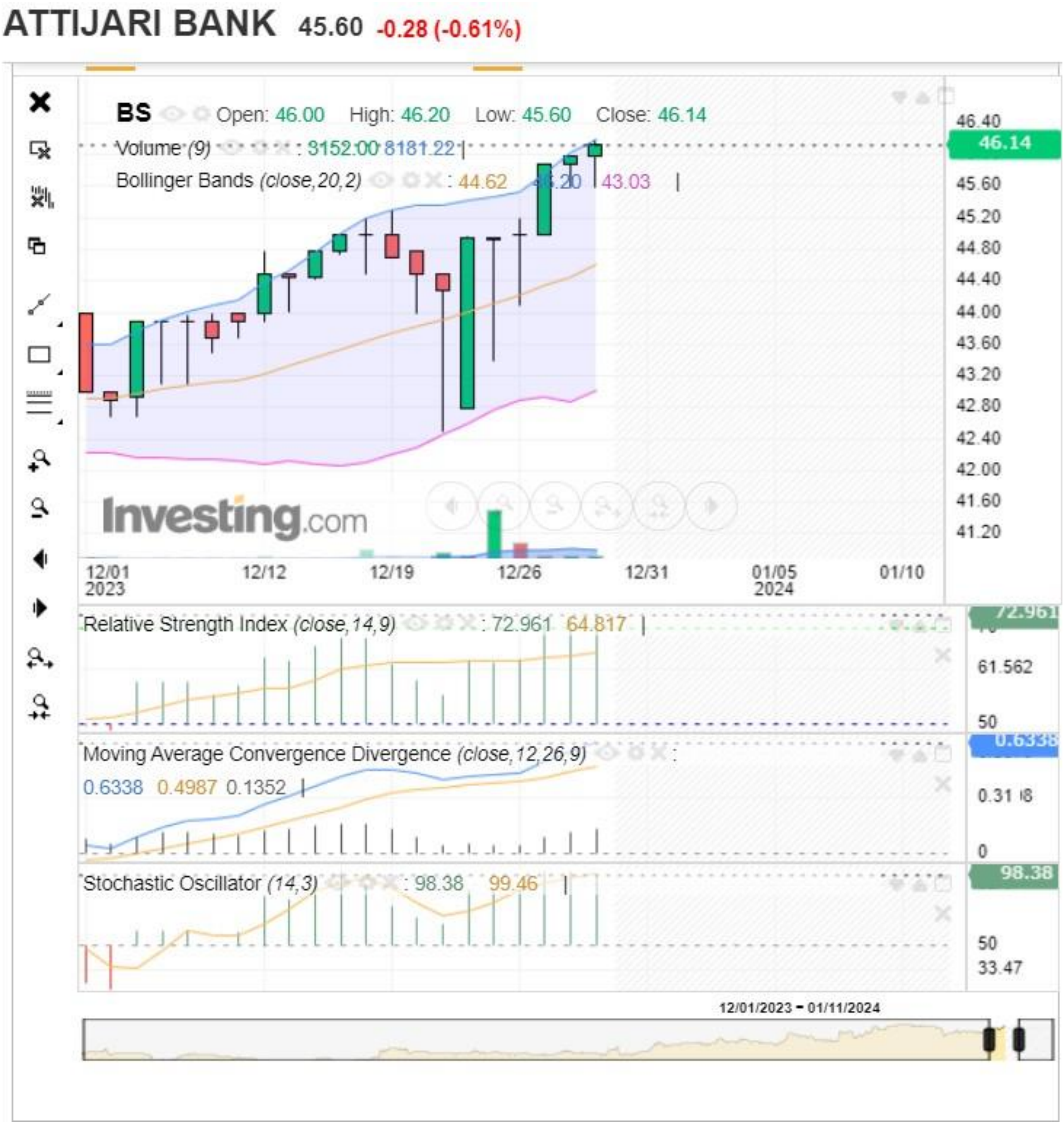
Our entry point was on the 22nd of December based on the RSI which is below 30 indicating an oversold stock and it is a buy signal .The MACD lina is also above the signal line .the situation didn't change for the week prices are still falling down .the % change is -0,49%without fees and -2,60% fees included .

SOTIPAPIER :



Our entry point was on the 22nd of december , no indicator gave us any signal (stock prices within the bands of the bollinger bands , stochastic below 80 , RSI below 70 , and no crossing over in MACD). we had a percentage change of 1.99% (with no fees) and -0.35% fees included .

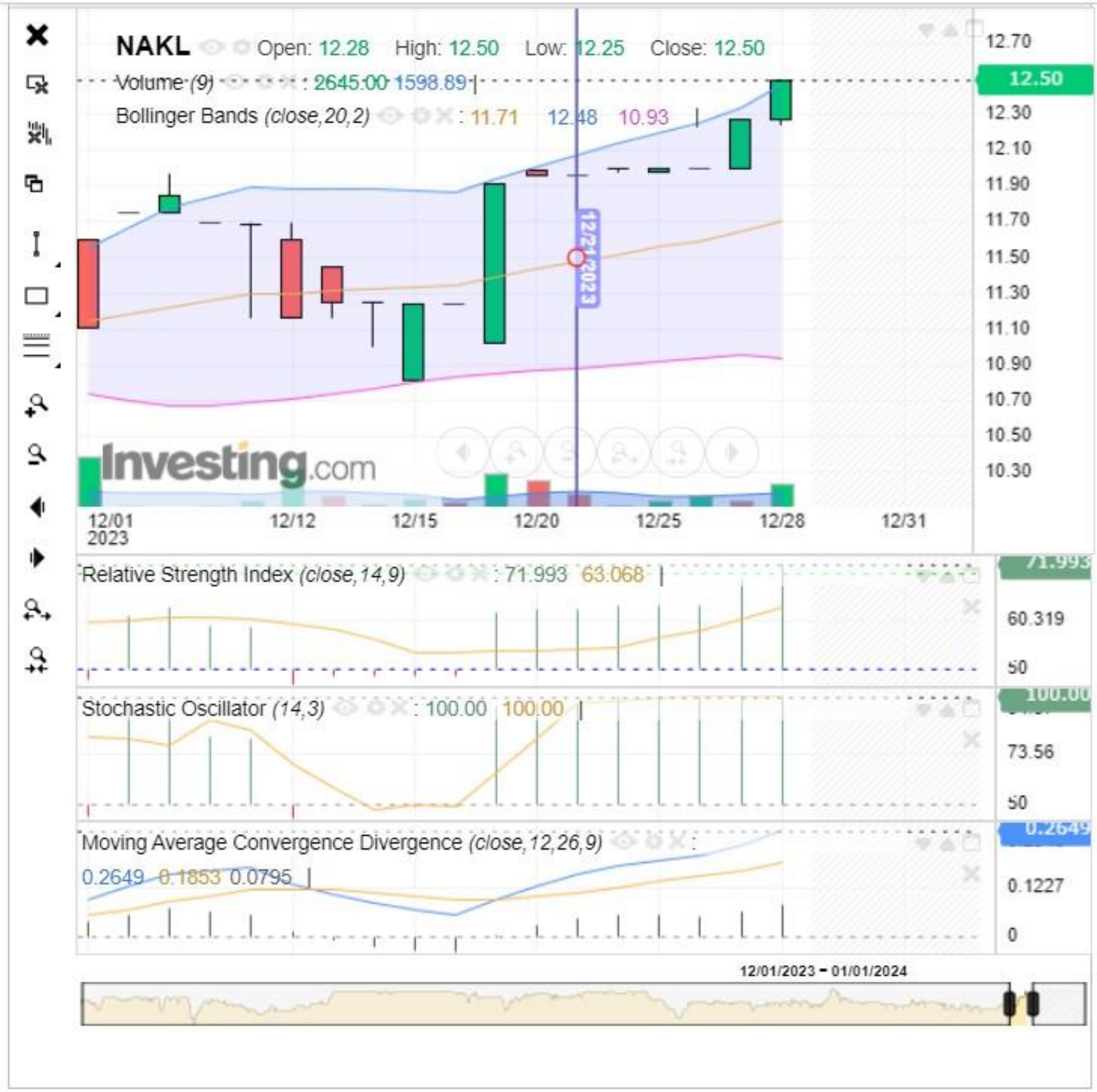
TIJARI:



Our entry point was on the 14th of December . the indicators did not give any sign so we held into the stock till the end of the project period and it gave us a change percentage of 3.8% (without fees) and3.32% (fees included)

ENNAKL:

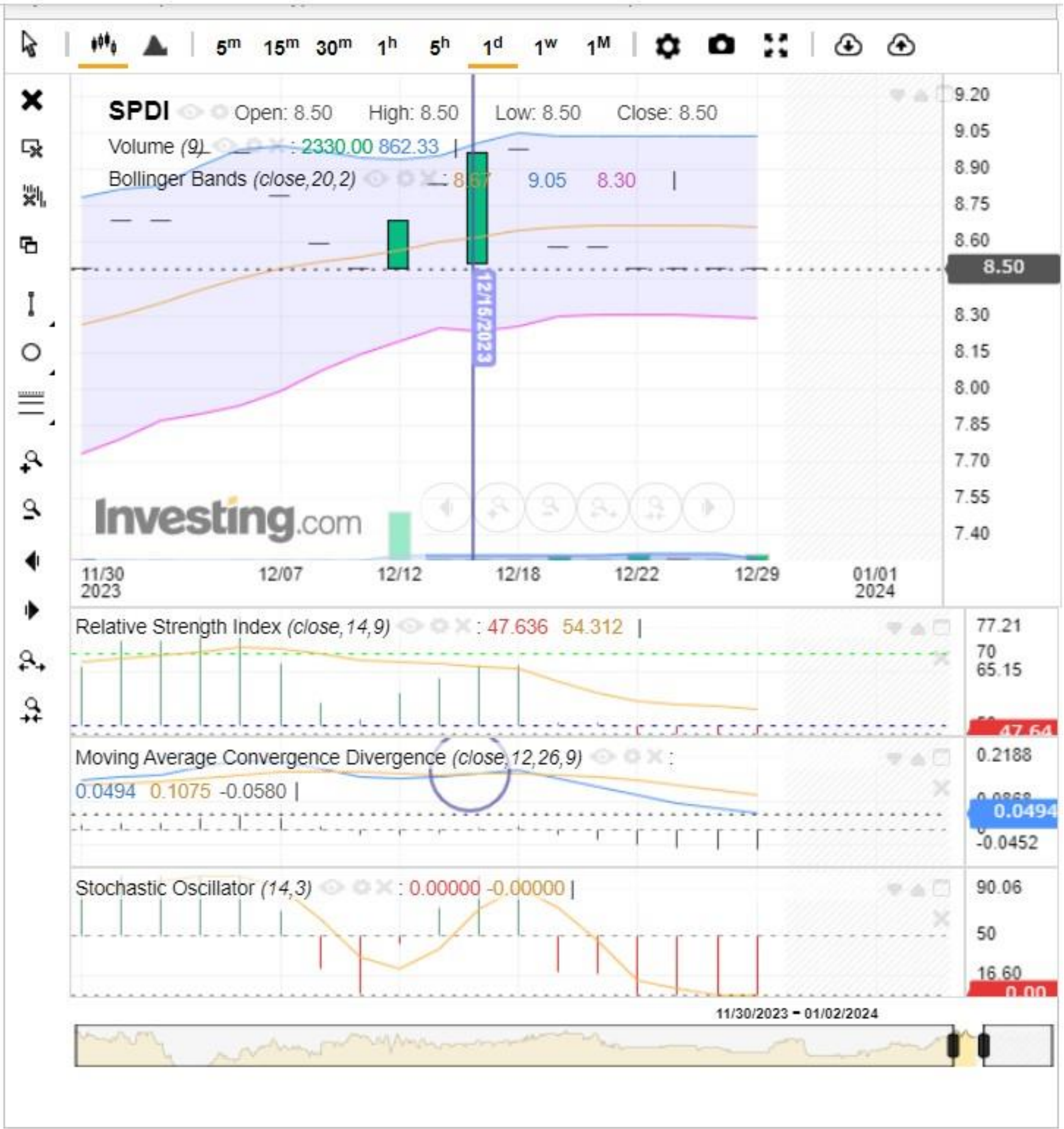
Ennakl Automobiles 12.28 0.00 (0.00%)



Our entry point was on the 22nd of December : 2 indicators were giving selling signals (MACD line below signal line ; stochastic oscillator above 80) while the other 2 were not giving any signal . we held into the stock as it was not moving until the last 2 days where it jumped and led us o a percentage change of 4.17% (no fees)and 2.95% (fees included).

Spdit-sicaf :

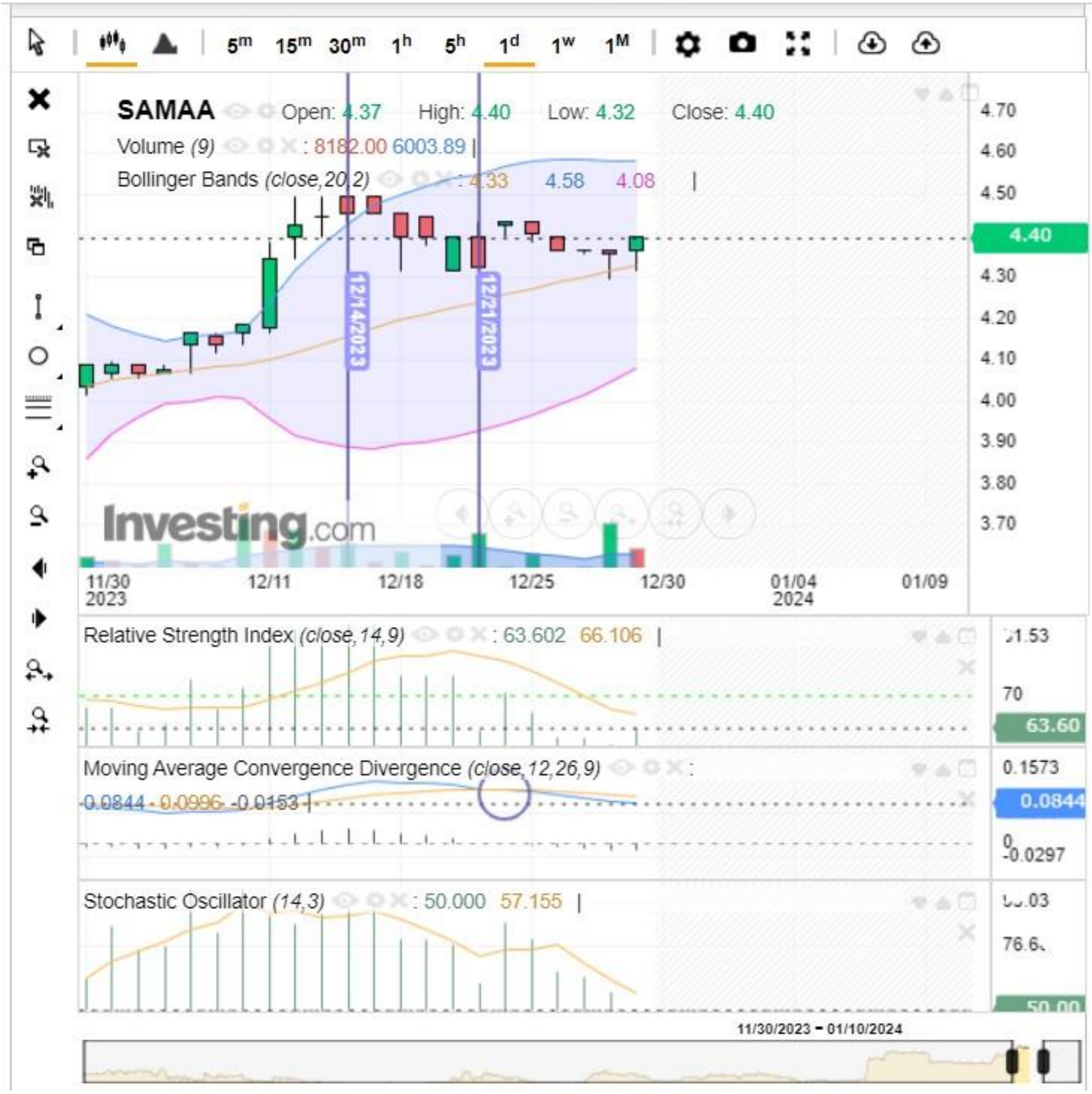
SPDIT-SICAF 8.50 0.00 (0.00%)



Our entry point was on the 15th of December , the MACD line is above the signal line .the price went up for the first 3 days and then it kept going down even though the indicators send a buying signal (MACD and stochastic oscillator). the percentage change with no fees is -0.23% and -1.79% fees included .

SAM :

Atelier Meuble Interieurs 4.40 +0.03 (+0.69%)



Our entry point was on the 14th of December , we bought 2 stocks .We had to sell 1 stock for reoptimization purposes . Since the MACD line is above the signal line we kept the stock and we had a percentage change of -2.22% (without fees) and -3.68% (fees included).

5.Portfolio Performance :

Actual return from 15/12 to 22/12:

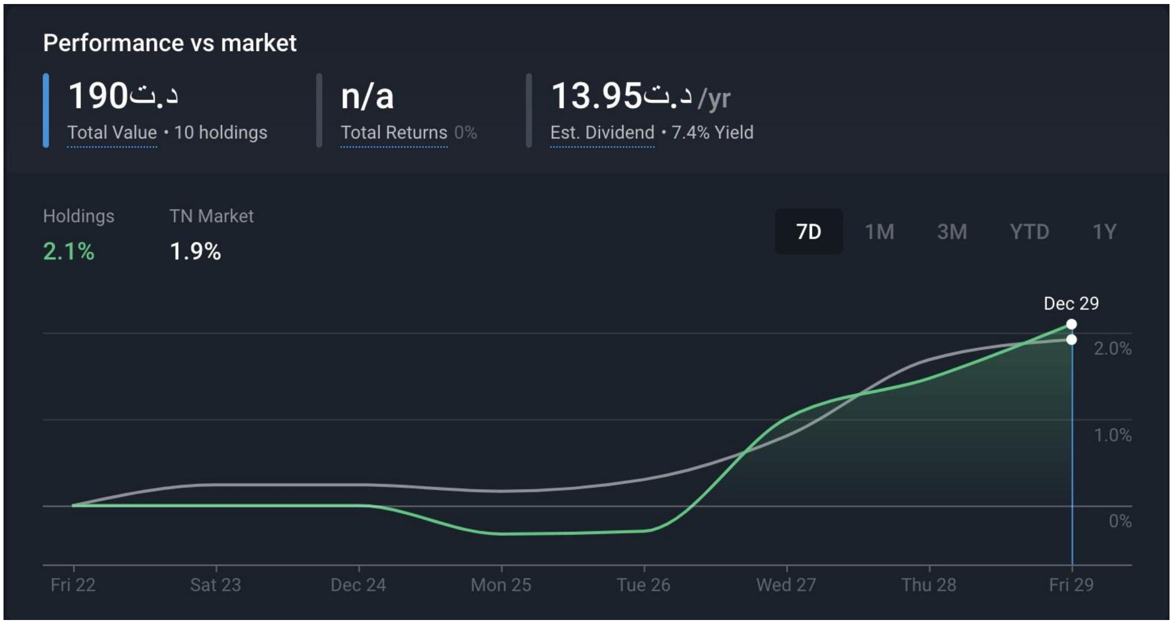
Following the first optimization of the portfolio on December 15, 2023, its total value was recorded at 191,097 DT. However, a week later, on December 22, 2023, the portfolio's value experienced a decrease, settling at 185,720 DT. This decline resulted in a negative return of -2.81375% over the specified period.

Actual return from 22/12 to 29/12:

Following the second optimization of the portfolio on December 22, 2023, its value stood at 185.720 DT. Subsequently, a mere week later, on December 29, 2023, the portfolio exhibited noteworthy growth, reaching a total value of 189.600 DT. This increase reflects a substantial return of 2.0892% over the seven-day period. The positive performance during this timeframe is indicative of the effectiveness of the adjusted investment strategy, particularly considering the relatively short duration between the two valuation points.

Portfolio vs Market :

In the assessment of the portfolio's performance relative to the Tunisian market during the period from December 22 to December 29, 2023, a nuanced picture emerges. Across the first two days of this period (December 22 to 26), the returns of the portfolio were slightly below those of the Tunisian market. This suggests that the market, as a whole, outpaced the portfolio during this timeframe. However, a noteworthy shift occurred as of December 27 and December 29, where the portfolio exhibited returns that surpassed those of the Tunisian market. On these specific days, the portfolio's performance outpaced the broader market, indicating strategic decisions or market dynamics that favored the portfolio's holdings during these particular trading sessions.This nuanced relationship between the portfolio and the Tunisian market from December 22 to December 29, 2023, is further influenced by the individual contributions of specific stocks within the portfolio. Notably, the increased returns observed on December 27 and December 29 can be primarily attributed to notable gains in the stocks TJARI and MGR. These stocks, carrying the highest weights in the portfolio at 24.3% and 21.4%, respectively, played a pivotal role in driving the overall positive performance. Their substantial impact underscores the significance of these key holdings in influencing theportfolio's returns during this specific timeframe.



Holdings 10

Sort Edit

Symbol	Price Vs Fair Value	7D Return	3M Return	Total Return	Value & Cost	Weight & Shares	Avg. Price	1Y chart
TJARI Banque Attija...	46.14د.ت 583.3% OVERVALUED	2.6% +1.18د.ت	11.6% +4.79د.ت	0% 0د.ت	46.14د.ت 0د.ت	24.3% 1	Add	
MGR Société...	5.08د.ت 36.1% OVERVALUED	3.9% +1.52د.ت	4.5% +1.76د.ت	0% 0د.ت	40.64د.ت 0د.ت	21.4% 8	Add	
UIB Union...	25.90د.ت n/a	n/a n/a	12.6% +2.90د.ت	0% 0د.ت	25.90د.ت 0د.ت	13.7% 1	Add	
SFBT Société de...	12.45د.ت 55.3% OVERVALUED	2.9% +0.70د.ت	-1.3% -0.32د.ت	0% 0د.ت	24.90د.ت 0د.ت	13.1% 2	Add	
STPIL La Société de...	14.95د.ت 104.8% OVERVALUED	0.3% +0.05د.ت	-1.6% -0.25د.ت	0% 0د.ت	14.95د.ت 0د.ت	7.9% 1	Add	
NAKL Ennakl...	12.50د.ت 325.7% OVERVALUED	4.2% +0.50د.ت	13.8% +1.52د.ت	0% 0د.ت	12.50د.ت 0د.ت	6.6% 1	Add	
SPDIT Société de...	8.50د.ت 390.3% OVERVALUED	n/a n/a	6.3% +0.50د.ت	0% 0د.ت	8.50د.ت 0د.ت	4.5% 1	Add	
AMV Assurances...	6.04د.ت 11.8% UNDERVALUED	-0.7% -0.04د.ت	-6.4% -0.41د.ت	0% 0د.ت	6.04د.ت 0د.ت	3.2% 1	Add	
STPAP Société...	5.63د.ت 129.0% OVERVALUED	0.2% +0.01د.ت	4.3% +0.23د.ت	0% 0د.ت	5.63د.ت 0د.ت	3.0% 1	Add	
SAM Société Atelie...	4.40د.ت 191.4% OVERVALUED	-0.9% -0.04د.ت	18.9% +0.70د.ت	0% 0د.ت	4.40د.ت 0د.ت	2.3% 1	Add	

References:

https://app.koyfin.com/

https://www.bvmt.com.tn/

https://www.investing.com/

https://finchat.io/blog/finchat-and-stratosphere-merge/

https://www.cmf.tn/

https://simplywall.st/