Sentiment Distribution of Daily News Headlines

585 (18.16%)
20 (0.62%)
2616 (81.22%)

Sentiment
- ● Positive
- ● Negative
- ● Neutral
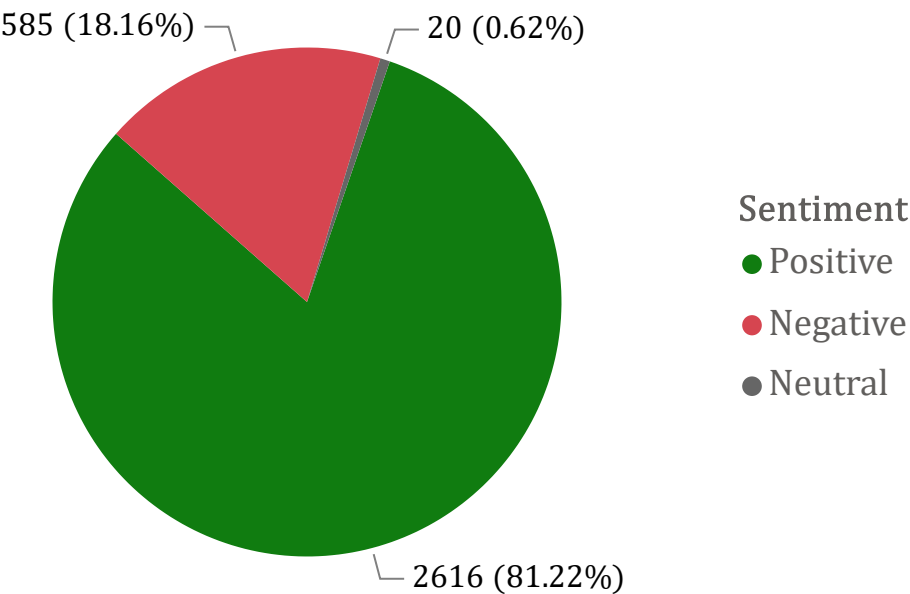
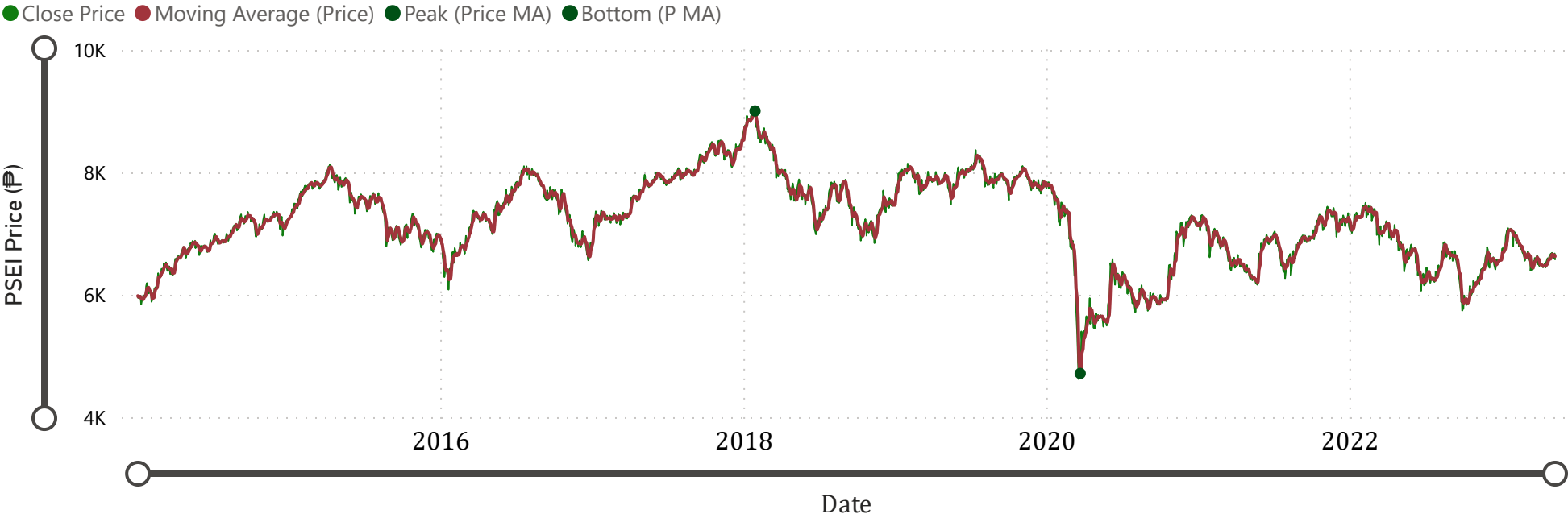## Average Sentiment Score

0.92
0.77
0.89
0.95
0.88
-0.36

Sentiment Score

-1.0 | -0.5 | 0.0 | 0.5 | 1.0

2016 | 2018 | 2020 | 2022
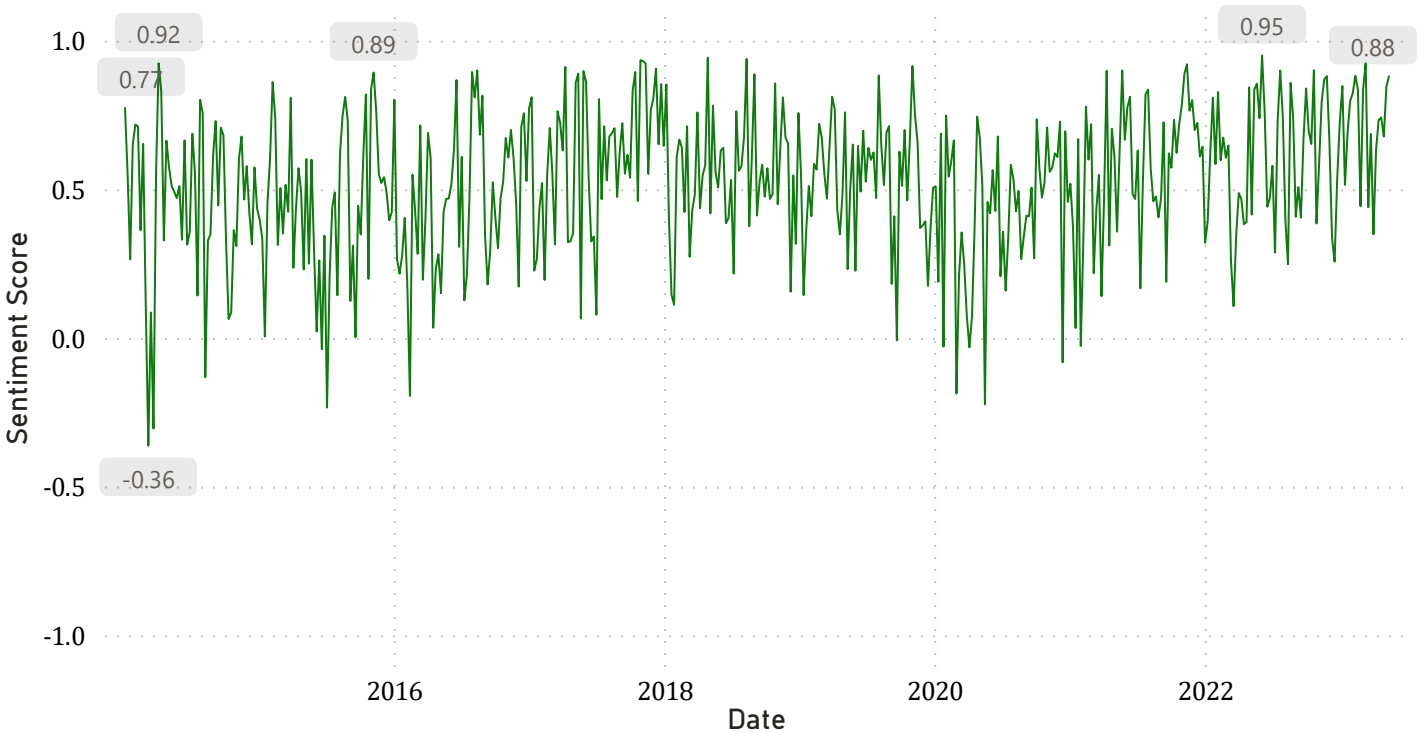
Date

Sentiment Analysis: News Headlines

Date	Headlines	Sentiment	Score
Sunday, May 14, 2023	US equity firm looks to more investments in PH. Nickel Asia Corp Announces its Notice of Annual General Meeting of Stockholders. DoF reconvenes the Green Force. Cebu MSMEs get training from DTI. Trade Chief Pascual calls for 'soft connectivity'. Stay-at-home moms' contribution beyond paycheck. Weaponization of legitimate tools. Developers are already using AI. Adapting supply chains to climate change. First device to update on Android 14 Beta 1. 3D billboard excellence puts PH in global map. Overcoming adversity with digitalization. Internet users cautioned against embedded malwares. Getting ready for developing secure EV. Miranda's doctrine.	Positive	0.74
Saturday, May 13, 2023	CEMEX Holdings Philippines, Inc Announces Notice of Annual Stockholders' Meeting. Metro Retail posts 80% net profit growth. Higher sales boost Puregold earnings. PAL Holdings posts P5.47-B profit in Q1. Peso down anew, PSEi drops below 6,600. LGU revenue generation project being readied. Alliance Select Foods International Inc Announces Notice of the 2023 Annual General Meeting of Stockholders. Growth still likely to fall below target. Pangandaman pushes higher infra spending. 'Serious repercussions' if US defaults on debt. IMF keeping 6.0% PH growth forecast. PH needs to keep growing its economy. Figaro net profit climbs 52%. Musk picks ad exec Linda Yaccarino as Twitter CEO. Nickel Asia Corp Notice of Annual General Meeting of Stockholders. Holcim PH 1st quarter net income declines. Nutrition affects swine's early growth. D.M. Wenceslao Q1 net drops to P525.6M. Phinma income dips to P484.56M. Stock indices as of May 12, 2023. Spanish RE firm stresses work safety. MMSU Balik-scientist boosts biomass RE production. Adidas to sell part of Yeezy gear for charity. Woman to be next Twitter CEO according to Musk. US shares slump after PacWest fall. Love, faith and climate change. Toshiba posts 35% decline in net profit. US debt ceiling talks moved next week. ChatGPT has started a regular AI boom in China. National roads should serve all Filipinos. Security Bank records slight net income drop. Bank of Commerce	Positive	0.99

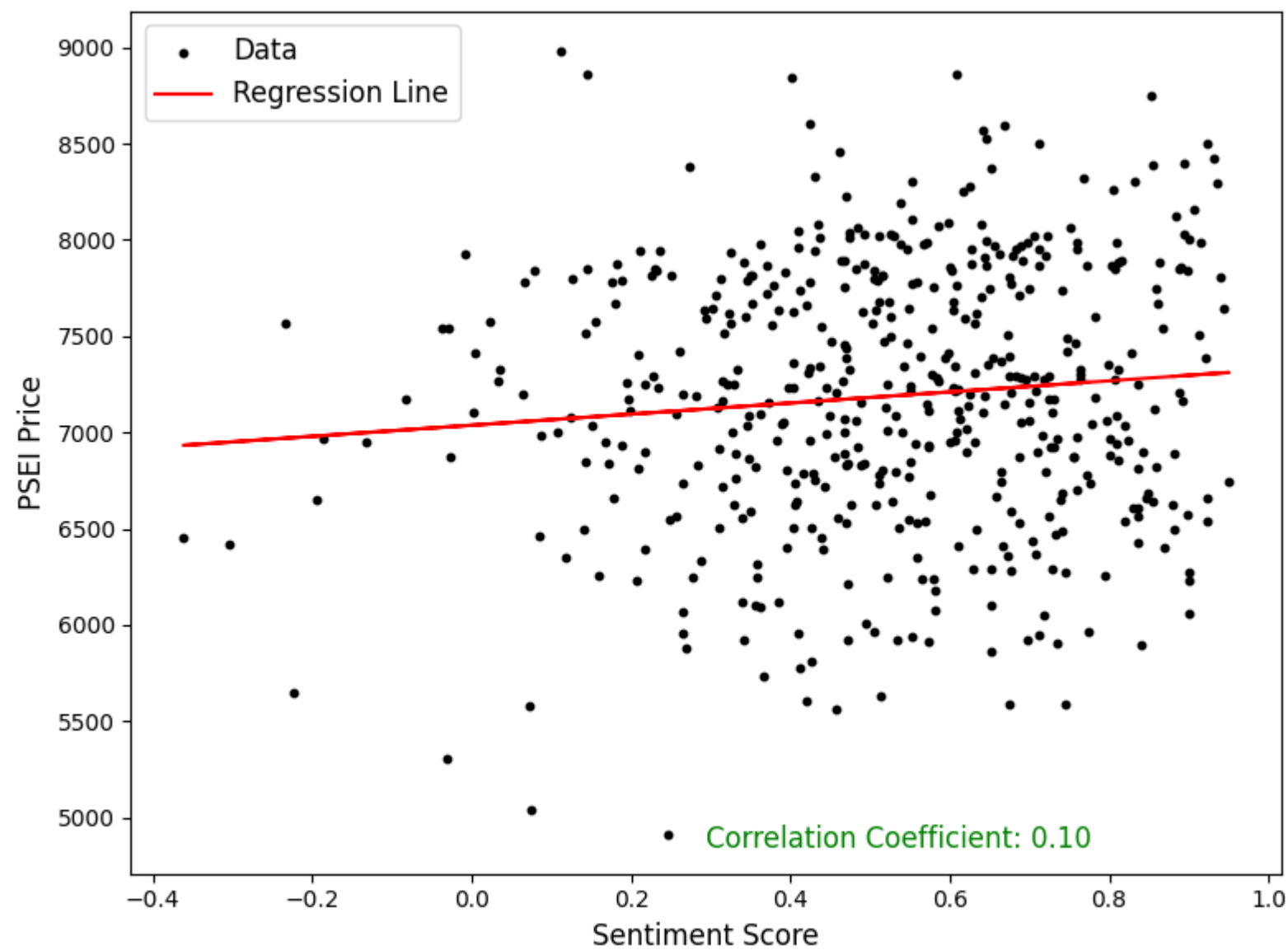# Trend Analysis: PSEI Price and Sentiment Score

The goal of trend analysis is to understand the underlying patterns and tendencies in the data. The first thing to do is to simply plot the time series data in a line chart and observed the movement and direction of the data.

Sentiment score chart and PSEI price chart, along with their respective Moving Averages were plot together for inspection. The use of moving average filters out the noise in the data, leaving a clearer view of the underlying trend. In the chart above, the moving averages were extracted and compared.
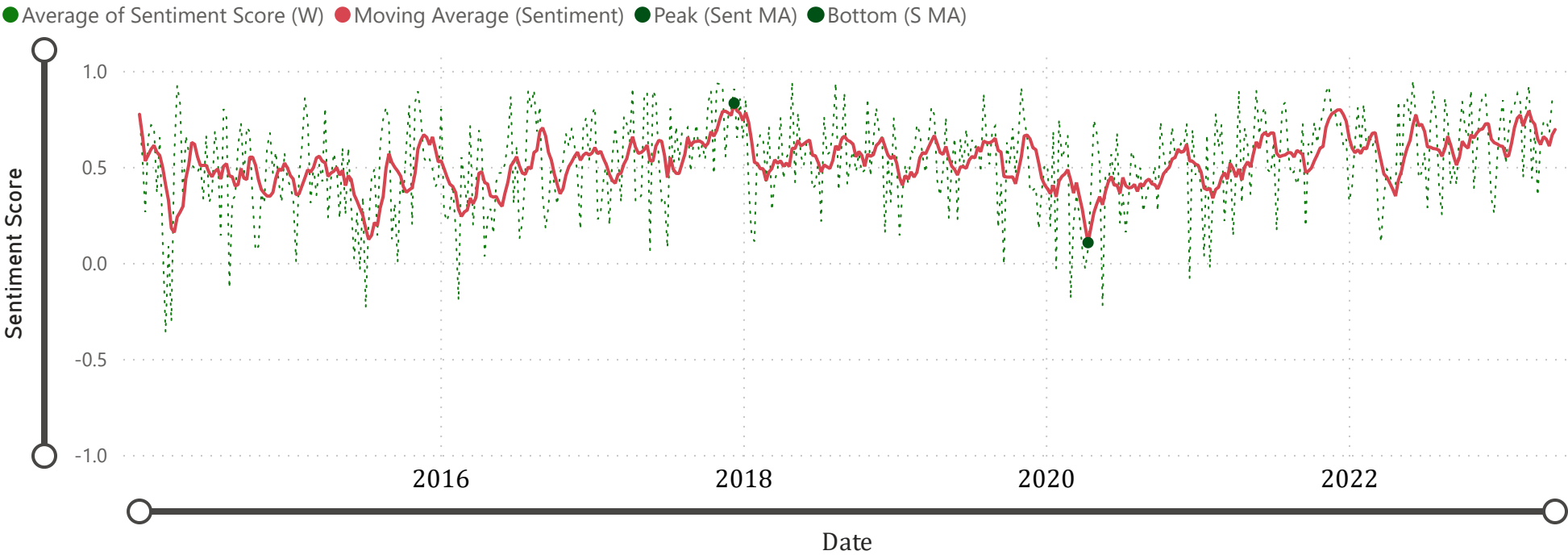
Through observation, we can see coinciding (from left to right) trend of higher lows and higher highs, data point peak, data point bottom, trend of higher lows and higher highs.
Based on the result of the inspection, a hypothesis about PSEI price and sentiment scores can be drawn, hence, a statistical analysis comes next.

Statistical Analysis: PSEI Price and Sentiment Score

The analysis reveals a correlation coefficient of 0.10 between stock price and sentiment score. This positive correlation suggests that an increase in sentiment score is associated with a slight upward movement in stock price. However, the correlation coefficient indicates a weak relationship between the two variables. Furthermore, the p-value associated with the correlation coefficient is found to be 0.026, which is below the commonly used significance level of 0.05. This implies that the observed correlation is statistically significant, indicating that the relationship between stock price and sentiment score is unlikely to have occurred by chance.

In conclusion, the result reveals a **statistically significant**, albeit weak, **positive correlation** between the two variables. These findings suggest that market sentiment, as reflected in the sentiment score, may play a role in stock price movements. In theory the correlation of a stock price and the people's sentiment should be strong but result shows otherwise, this may be explained by the data used for sentiment analysis is relatively unreliable which may be caused by news headlines being brief, hence, a topic for another research.

PSEI Price/Trend Forecast

● PSEI Price ● ARIMA ● LSTM ● XGBR ● Prophet ● Lower Boundary ● Upper Boundary

PSEI Price (₱)

9K
8K
7K
6K
5K
4K

2016   2018   2020   2022   2024

Date