Data Analysis and Business Management

Crypto Price Analysis and World Financial Order

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ABSTRACT: - The Data Science and Business Management project on Crypto Price Analysis and World Financial Order aims to conduct a comprehensive analysis of the XRP cryptocurrency and its potential implications for the global financial order. XRP is a digital asset and cryptocurrency developed by Ripple Labs that has gained considerable attention in the global financial landscape. The study involves collecting historical XRP price data over a period of months, to understand its price movements, trends in volume, price and number of transactions. The findings highlight volatility and uncertainty in the cryptocurrency market, as well as the need for comprehensive analysis to minimize risk and maximize returns. It also involves market research to find out the development of a new financial system and whether the dependence on US dollar be impacted. The paper deals with data pre-processing, descriptive analysis, and exploratory analysis used to draw insightful conclusions.

I. INTRODUCTION

XRP, a digital asset and cryptocurrency created by Ripple Labs, cofounded by Jed McCaleb and Chris Larsen in 2011, is at the forefront of transforming the way we transact across borders and redefining the future of global payments. Since its inception in 2012, XRP has captured the attention of the financial world, providing a unique and effective solution for fast, low-cost, and secure international money transfers. At its core, XRP acts as a bridge currency in Ripple's payments network, RippleNet, facilitating seamless exchange between different currencies. This innovative approach addresses inefficiencies inherent in traditional cross-border transactions, such as high fees, long settlement times and cumbersome intermediary processes. To better understand the investment potential of XRP, it is necessary to conduct thorough research and analysis based on historical data and the factors that influence price changes.

II. DATA COLLECTION

Data collection is an important step in the process of gathering information and data points to support research, analysis, decision making or any other specific purpose. It involves systematically gathering relevant data from a variety of sources to answer specific questions or solve a particular problem. The data collection process can vary greatly depending on the nature of the project and the type of data required. Properly collected and analyzed data can provide valuable information that enables informed decision making and contributes to understanding of various phenomena.

In order to do the analysis of XRP we collected data over a period of 16 months from January 2022 to April 2023.

1. Collect data for the years 2022-2023 that is from January 2022 to April 2023 from the link below: https://data.binance.vision/?prefix=data/spot/monthly/klines/XRPUSDT/1d/
2. Download the 16 required files.
3. Unzip the files.

4. Find the parameters for the attributes from the following link.
   https://github.com/binance/binance-public-data/
5. Now merge the 16 files into one csv file. While merging add the headers which we got from the above link to each column.

The headers used are explained below.

a) Open time- Timestamp or time when a particular trading event or data point occurs.
b) Open- Price of the cryptocurrency at the start of the time interval.
c) High- Highest price reached by the cryptocurrency in the time interval.
d) Low- Lowest price reached by the cryptocurrency in the time interval.
e) Close- Price of the cryptocurrency at the start of the time interval.
f) Volume- Total amount or quantity of cryptocurrency traded during the time interval.
g) Close time- Timestamp or time when a particular trading event or data point concludes.
h) Quote asset volume- The total trading volume of the cryptocurrency expressed in terms of the quote asset (the asset being traded against, such as USD or BTC).
i) Number of Trades: The total number of trades executed during the time interval.
j) Taker-buy base asset volume-. The total volume of the cryptocurrency bought by takers (traders who remove liquidity from the order book by placing market orders).
k) Taker-buy quote asset volume- The total volume of the quote asset (e.g., USD or BTC) used for buying the cryptocurrency by takers.

Apart from this we have also added a Date column at the end for easy calculations. The data is as shown in the figure below.

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	Open time	Open	High	Low	Close	Volume	Close time	Quote asset volume	Number of trades	Taker buy base asset volume	Taker buy quote asset volume	Ignore	Date
0	1.641000e+12	0.8298	0.8557	0.8297	0.8507	136976730.0	1.641080e+12	1.155075e+08	178238	70090109.0	5.911341e+07	0	2022-01-01
1	1.641080e+12	0.8508	0.8667	0.8372	0.8586	129688032.0	1.641170e+12	1.102656e+08	176940	65996017.0	5.611762e+07	0	2022-01-01
2	1.641170e+12	0.8586	0.8587	0.8213	0.8324	178618617.0	1.641250e+12	1.498761e+08	232484	89735857.0	7.529882e+07	0	2022-01-03
3	1.641250e+12	0.8324	0.8456	0.7794	0.8228	214415744.0	1.641340e+12	1.776919e+08	270966	104076850.0	8.636767e+07	0	2022-01-03
4	1.641340e+12	0.8227	0.8372	0.7092	0.7726	370612510.0	1.641430e+12	2.947838e+08	482373	173152247.0	1.379976e+08	0	2022-01-04
...	...	...	...	...	...	...	...	...	...	...	...	...	...
481	1.682550e+12	0.4618	0.4699	0.4557	0.4667	345756985.0	1.682640e+12	1.598163e+08	166405	170265417.0	7.866522e+07	0	2023-04-26
480	1.682470e+12	0.4696	0.4831	0.4329	0.4618	551155391.0	1.682550e+12	2.564634e+08	280441	277180801.0	1.290672e+08	0	2023-04-26
482	1.682640e+12	0.4666	0.4830	0.4637	0.4796	384917512.0	1.682730e+12	1.819223e+08	203480	218738540.0	1.033765e+08	0	2023-04-28
483	1.682730e+12	0.4795	0.4869	0.4709	0.4780	175533507.0	1.682810e+12	8.416326e+07	122677	86163575.0	4.131692e+07	0	2023-04-29
484	1.682810e+12	0.4779	0.4819	0.4687	0.4705	143199211.0	1.682900e+12	6.812466e+07	91324	71983476.0	3.424115e+07	0	2023-04-29

485 rows × 13 columns

III. DATA CLEANUP

Data cleansing refers to the process of identifying and correcting errors, inconsistencies, and inaccuracies in a data set to improve its quality and reliability. The goal of data cleaning is to ensure that the data is accurate, complete, and ready for analysis or use in various applications. This process is important because poor data

quality can lead to erroneous conclusions, inefficient operations, and unreliable decision making. Data cleaning is an iterative process, and many rounds of review and improvement may be required to achieve the desired level of data quality. Reliable and properly cleaned data can lead to more accurate and meaningful insights, enabling better decision making and more efficient data-driven solutions.

In order to clean the data, we followed the steps below.

a) Remove any missing values or irrelevant values from the dataset.
b) Check for Outliers, Null values, and duplicate entries and remove them.

The dataset was cleaned using isna() function and no outliers or null values were found.

IV. DESCRIPTIVE ANALYSIS

Descriptive analysis is a statistical method used to summarize and describe the main characteristics of a data set. Its main goal is to provide a clear and concise understanding of data through various summary statistics, tables and charts. Descriptive analysis is the first step in data analysis and helps to gain insight into the data without making inferences or generalizations beyond the observed data. Descriptive analysis is not concerned with making predictions or drawing conclusions about a larger population. Instead, it focuses on describing characteristics of observed data. It is particularly useful in exploratory data analysis (EDA), where the goal is to gain an initial understanding of the data before proceeding to more advanced analysis or modeling. In general, descriptive analysis is a fundamental step in any data analysis process as it helps to reveal outliers, trends, and patterns in the data, providing a deeper understanding of underlying phenomena. version studied.

a) Measures of Central Tendency: - These statistics provide information about the central or typical value of the data set. The most used measures of central tendency are mean, median, and mode.

    a. Mean: - The average of all values.
    b. Median: - Arrange data in ascending order. Then take the middle value.
    c. Mode: - The value that repeats the most

b) Measures of Dispersion: Distributed statistics give an idea of the distribution of data points in a data set. Common measures of dispersion include range, variance, and standard deviation.

    a. Standard Deviation - Indicates how far the individual data points are from the mean.
    b. Variance - Specify a measure of the mean squared deviation of the data points from the mean.

c. Range - Shows the difference between the largest and the smallest point in the data set. It shows how far apart the extreme values are in a data set.

c) Quartile analysis: Quartile analysis is a type of descriptive statistics that divides a data set into four equal parts or quartiles, each with an equal number of observations.

Q1: The lower quadrant of the data.

Q2: The middle quadrant of the data.

Q3: The upper quarter of the data.

d) Minimum value: In a data set, the minimum value can help determine the least extreme data point or the starting point of the data.

e) Maximum value: In a data set, the maximum value can help determine the most extreme data point or the end point of the data.

We use the describe () function to perform descriptive analysis. The figure below shows the descriptive analysis of the given dataset.

	Open time	Open	High	Low	Close	Volume	Close time	Quote asset volume	Number of trades	Taker buy base asset volume	Taker buy quote asset volume	Ignore
count	485	485.000000	485.000000	485.000000	485.000000	4.850000e+02	4.850000e+02	4.850000e+02	4.850000e+02	4.850000e+02	4.850000e+02	485.0
mean	1970-01-01 00:27:41.904000	0.490232	0.504824	0.473165	0.489495	3.639373e+08	1.661990e+12	1.764548e+08	2.453589e+05	1.799599e+08	8.717487e+07	0.0
min	1970-01-01 00:27:20.995200	0.307400	0.318100	0.287200	0.307500	6.285791e+07	1.641082e+12	2.213677e+07	3.733700e+04	2.963599e+07	1.043701e+07	0.0
25%	1970-01-01 00:27:31.449600	0.371400	0.380000	0.358300	0.371400	2.214056e+08	1.651536e+12	1.005551e+08	1.409530e+05	1.093915e+08	4.939429e+07	0.0
50%	1970-01-01 00:27:41.904000	0.407900	0.419200	0.394400	0.407800	3.225324e+08	1.661990e+12	1.459509e+08	1.969650e+05	1.621972e+08	7.298217e+07	0.0
75%	1970-01-01 00:27:52.358400	0.602200	0.623200	0.580100	0.601300	4.223136e+08	1.672445e+12	2.107851e+08	2.831080e+05	2.133808e+08	1.057330e+08	0.0
max	1970-01-01 00:28:02.812800	0.876300	0.930000	0.852800	0.876300	1.820626e+09	1.682899e+12	9.177689e+08	1.336231e+06	8.986153e+08	4.578560e+08	0.0
std	NaN	0.164884	0.170225	0.158905	0.164162	2.276729e+08	1.210911e+10	1.215617e+08	1.758658e+05	1.109886e+08	5.963783e+07	0.0

Additional Analysis

Here we calculated additional values like Range, Maximum of High, Minimum of Low, Average Volatility and Average.

```
Range:
Open time                       0 days 00:00:41.817600
Open                                            0.5689
High                                            0.6119
Low                                             0.5656
Close                                           0.5688
Volume                                    1757767833.0
Close time                                  41817600000
Quote asset volume                     895632092.1635
Number of trades                              1298894
Taker buy base asset volume                868979326.0
Taker buy quote asset volume           447418981.8447
Ignore                                              0
dtype: object

Max of High:
0.93

Min of Low:
0.2872

Average Volatility:
0.03165896907216495

Average:
...
Taker buy base asset volume     1.799599e+08
Taker buy quote asset volume    8.717487e+07
Ignore                          0.000000e+00
dtype: float64
```

Relative Strength Index (RSI)

RSI is a popular momentum oscillator used in technical analysis to measure the speed and variability of price movements in a financial asset. The RSI is a valuable tool for traders and investors to understand whether an asset is overbought or oversold and can provide information about a possible trend reversal or continuation.

RSI is calculated according to the given formula.

Calculating RSI

The RSI uses a two-part calculation that starts with the following formula:

$$RSI_{\text{step one}} = 100 - \left[\frac{100}{1 + \frac{\text{Average gain}}{\text{Average loss}}}\right]$$

RSI values range from 0 to 100. In general, an RSI above 70 is considered overbought, indicating that the assets may have risen too much and possibly due to a potential drop or correction. Conversely, an RSI below 30 is considered oversold, suggesting that the asset may have fallen too low, and possibly due to a bounce or recovery. Interpretation of the RSI readings:

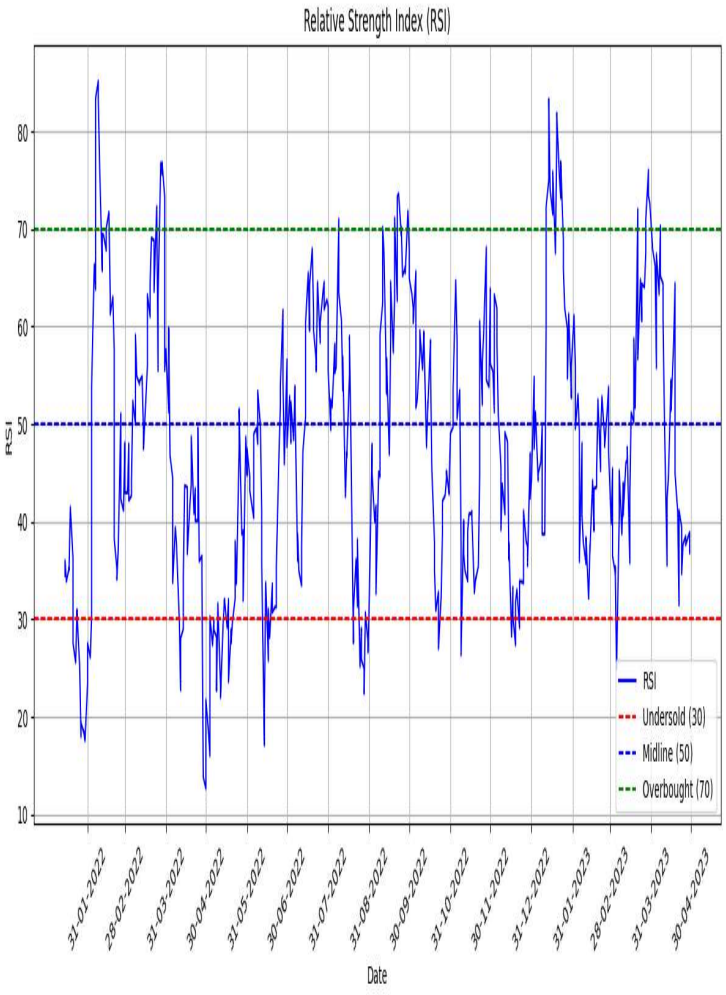
RSI > 70: - Overbought condition, potential sell signal.

RSI<30: - Oversold status, potential buy signal

RSI between 30 and 70: - Neutral state, no obvious signs.

Traders and investors use the RSI in conjunction with other technical indicators and chart patterns to make more informed decisions about buying or selling assets.

RSI for the data was calculated and a graph was plotted to find the trend of RSI.



V. EXPLORATORY DATA ANALYSIS

Exploratory data analysis (EDA) is an essential and initial step in the data analysis process. It involves visually and quantitatively exploring the key features of a data set to gain insights, discover patterns, detect anomalies, and form hypotheses. The main goal of EDA is to understand the structure and distribution of data before applying more complex statistical techniques or building predictive models. The main techniques used in exploratory data analysis include Summary statistics, Data visualization, Data cleaning and preprocessing, Univariate analysis, Two-variable analysis, Multivariate analysis, Dimensionality Reduction, Clustering, Feature Engineering and Geospatial Analysis.

Python libraries such as Pandas, NumPy, Matplotlib, Seaborn, and Plotly, as well as R libraries such as ggplot2, dplyr, and ggvis are commonly used to perform exploratory data analysis. Here we mainly use Pandas, NumPy and Matplotlib.

The required graphs are plotted and from these plots the trends needed are found out. Using these, we found the answers for the questions.

1. What is the trend in price data?

- A graph is plotted with Date on X-axis and Price on Y-axis.

- Q1 Price Trend (January 2022 to April 2022): During the first quarter, the graph shows a small increase in the price of XRP. This uptrend indicates that the value of XRP experienced a modest rise during this period. Several factors could have contributed to this increase, such as positive market sentiment, adoption by financial institutions, or favourable news developments related to XRP. But overall, it shows decline.

- Q2 Price Trend (May 2022 to August 2022): The graph demonstrates a steep decline in the price of XRP during the second quarter. This significant drop in price suggests a bearish market sentiment during this period. Various factors could have triggered the price decline, such as regulatory concerns, negative news events, or profit-taking by investors following the price increase in the previous quarter.

- Q3 Price Trend (September 2022 to April 2023): In the third quarter, the graph indicates an increase in the price of XRP. This uptrend shows a recovery from the sharp decline observed in the previous quarter. Factors that contributed to this price recovery could include positive market developments, increased adoption, or improved sentiment within the cryptocurrency market.

- Overall, Price Trend: Despite the fluctuations in each quarter, the overall trend depicted by the graph shows a decline in the price of XRP. This suggests that, when considering the entire time period, the price of XRP decreased over time. The overall decline could be influenced by multiple factors, such as regulatory uncertainty, market dynamics, competition with other cryptocurrencies, or broader economic trends.

2. What is the Volume trend?

- A graph is plotted with Date on X-axis and Volume on Y-axis

- Q1 Volume Trend (January 2022 to April 2022): During the first quarter, the graph shows a decline in trading volume. This indicates that the total quantity of XRP traded during this period decreased compared to the previous time frame. The decline in volume could be influenced by various factors, such as seasonal market trends, reduced trading activity during holidays, or shifts in market sentiment.

- Q2 Volume Trend (May 2022 to August 2022): The graph demonstrates a further decline in trading volume during the second quarter. This suggests a continuation of reduced trading activity compared to the previous quarter. Factors contributing to the decline in volume may include regulatory developments, external events impacting market participation, or investor caution during times of high price volatility.

- Q3 Volume Trend (September 2022 to April 2023): In the third quarter, the graph indicates that the trading volume remains almost constant. This means that the total quantity of XRP traded during this period is relatively stable compared to the previous quarters. The constant volume could be influenced by factors such as market stabilization, increased adoption, or consistent participation by traders and investors.

- Overall Volume Trend: Despite the fluctuations in each quarter, the overall trend depicted by the graph shows an increasing trend in trading volume. This suggests that, when considering the entire time period, the trading volume of XRP has been on an upward trajectory. The overall increasing volume could reflect growing interest and participation in the XRP market, as well as an indicator of increased liquidity.

3. Are there certain days in the month where volume is higher/ lower than normal?

For this, we have created a table consisting of Month, Max Volume, Min Volume, Date of Max Volume and Date of Min Volume.

Month	Max Volume	Min Volume	Date of Max Volume	Date of Min Volume
Jan 2022	7.699479e+08	125068081.0	2022-01-22	2022-01-15
Feb 2022	1.048879e+09	157303166.0	2022-02-08	2022-02-06
Mar 2022	5.890591e+08	122433652.0	2022-03-11	2022-03-25
Apr 2022	4.396765e+08	102131244.0	2022-04-14	2022-04-08
May 2022	1.598444e+09	143783091.0	2022-05-11	2022-05-22
Jun 2022	1.028752e+09	134031506.0	2022-06-13	2022-06-03
Jul 2022	4.042377e+08	131799232.0	2022-07-17	2022-07-08
Aug 2022	4.392118e+08	88658479.0	2022-08-25	2022-08-05
Sep 2022	1.820626e+09	95913393.0	2022-09-22	2022-09-04
Oct 2022	6.017516e+08	155163123.0	2022-10-13	2022-10-14
Nov 2022	9.780826e+08	145313373.0	2022-11-08	2022-11-19
Dec 2022	4.401181e+08	62857912.0	2022-12-13	2022-12-24
Jan 2023	7.238948e+08	103851424.0	2023-01-22	2023-01-07
Feb 2023	5.570184e+08	123179600.0	2023-02-19	2023-02-10
Mar 2023	1.698381e+09	163637644.0	2023-03-21	2023-03-04
Apr 2023	6.201533e+08	116122379.0	2023-04-18	2023-04-09

By analysing this table, the dates are found.

- Higher
    i. 08-02-2022
    ii. 11-05-2022
    iii. 13-06-2022
    iv. 22-09-2022
    v. 21-03-2023
- Lower
    i. 05-08-2022
    ii. 04-09-2022
    iii. 24-12-2022

4. Are there certain months where prices are higher / lower than normal?

For this, a table consisting of Month and Average Price is created.

	Month	Average Price
0	2022-01	0.717225
1	2022-02	0.759557
2	2022-03	0.795003
3	2022-04	0.729657
4	2022-05	0.459790
5	2022-06	0.353177
6	2022-07	0.346884
7	2022-08	0.357881
8	2022-09	0.393753
9	2022-10	0.475681
10	2022-11	0.400930
11	2022-12	0.366958
12	2023-01	0.382470
13	2023-02	0.390493
14	2023-03	0.410661
15	2023-04	0.495137

From this table the months are found for higher values. There are no lower values as all other comes inside a normal range.

- January 2022
- February 2022
- March 2022
- April 2022

5. Is there a correlation between “Volume” and “Quote Asset Volume”?

The positive correlation between “Volume” and “Volume of Quoted Assets” in XRP would indicate that when one variable increases, the other also tends to increase. On the other hand, a negative correlation would indicate that when one variable increases, the other tends to decrease. A correlation coefficient of 0 indicates that there is no linear relationship between the two variables.

The correlation coefficient can be a value ranging between -1 and 1. The correlation value between Volume and Quote Asset Volume is 0.868005. The value shows a strong positive correlation between both as it is nearing the value of 1. This shows the linear relationship between both values.

6. Is there a trend in “Number of trades”? What does it specify?

- A graph is plotted with Date on X-axis and Number of Trades on Y-axis.

- Q1 Number of Trades Trend (January 2022 to April 2022): During the first quarter, the graph shows a decline in the number of trades. This indicates that the total number of trades executed for XRP decreased compared to the previous time frame. The decline in trading activity could be influenced by various factors, such as seasonal market trends, changes in market sentiment, or lower trading participation during certain periods.

- Q1 Number of Trades Trend (May 2022 to August 2022): During the first quarter, the graph shows a decline in the number of trades. This indicates that the total number of trades executed for XRP decreased compared to the previous time frame. The decline in trading activity could be influenced by various factors, such as seasonal market trends, changes in market sentiment, or lower trading participation during certain periods.

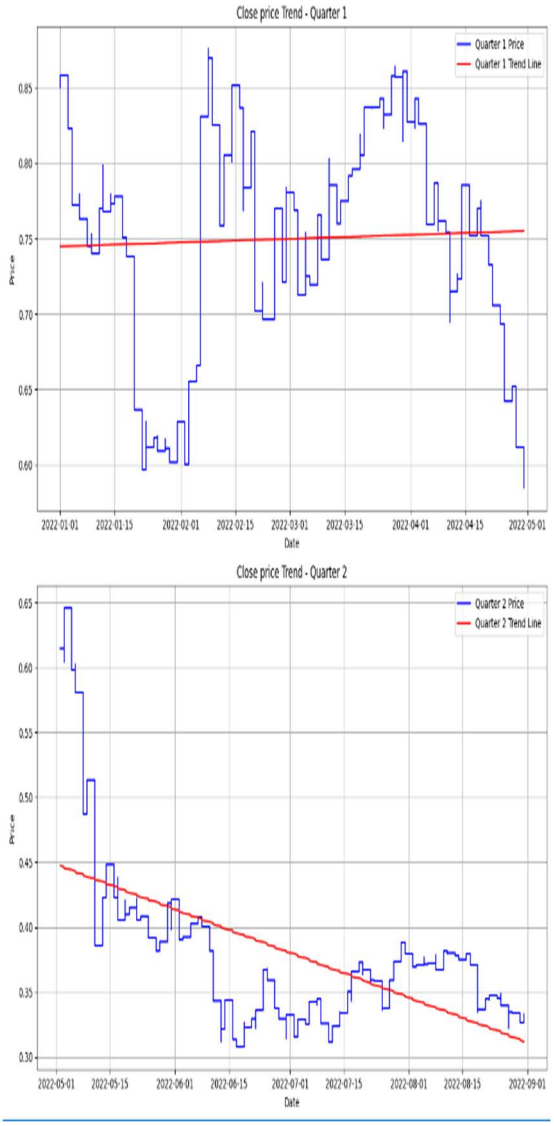
- Q3 Number of Trades Trend (September 2022 to April 2023): In the third quarter, the graph shows a similar pattern of declining trades. This indicates that the total number of trades executed for XRP remained low and relatively stable during this period. The consistent decline in trading activity may be influenced by factors such as a lack of significant market-moving events, a wait-and-see approach by traders, or a reduction in speculative trading.
- Overall Number of Trades Trend: Considering the trends in each quarter, the overall trend depicted by the graph indicates a declining pattern in the number of trades over time. This suggests that the trading activity for XRP has been on a downward trajectory when considering the entire time period. The overall decline in the number of trades could reflect lower market participation and reduced trading interest during the analysed period.

VI. DATA VISUALIZATION

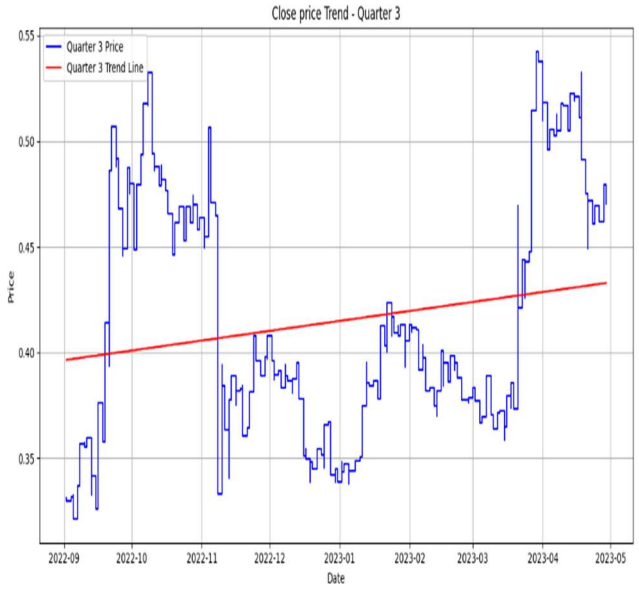
Data visualization is a graphical representation of data and information. It involves creating visuals such as tables, charts, and maps to help understand patterns, trends, relationships, and data insights. Data visualization is a powerful tool

for communicating complex information concisely, making it easier for users to understand and interpret data.

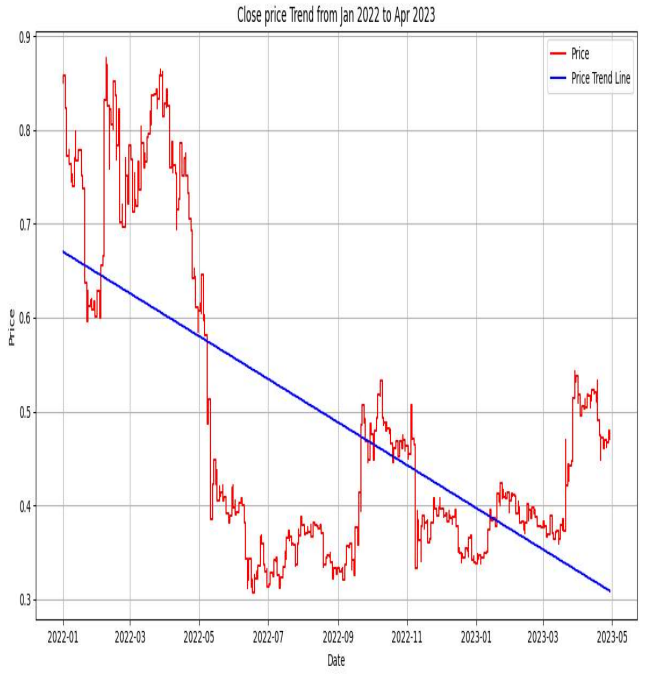
1. Price Trend



The graph shows the price trend in Q1 and Q2. By observing the plot, we can find that there is an increasing trend in price in Q1. When we observe Q2, we can find the trend is declining.

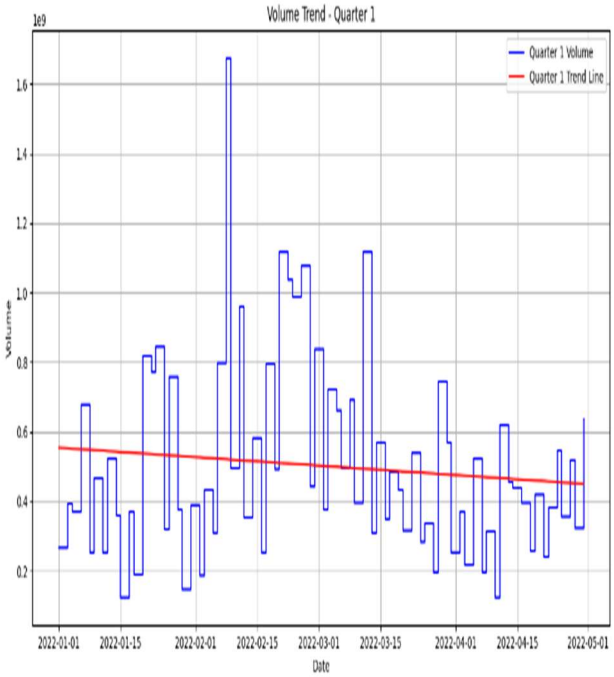


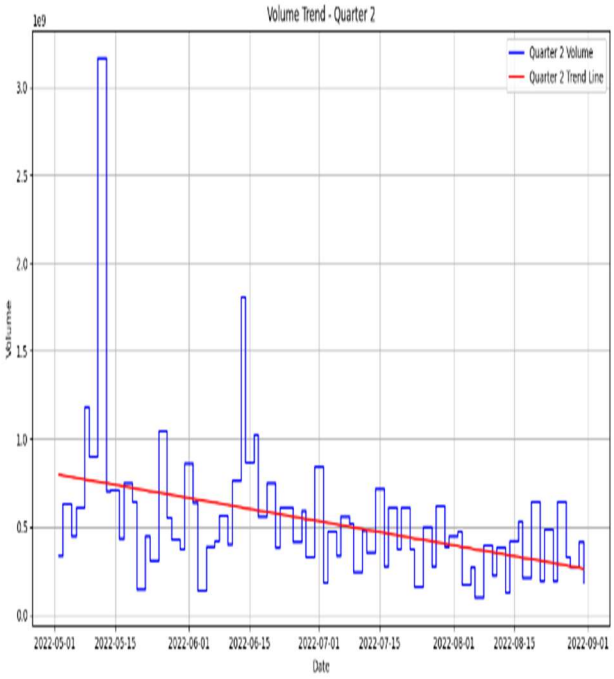
This shows the analysis of prices in Q3. Here it can be seen that the trend in price is increasing.



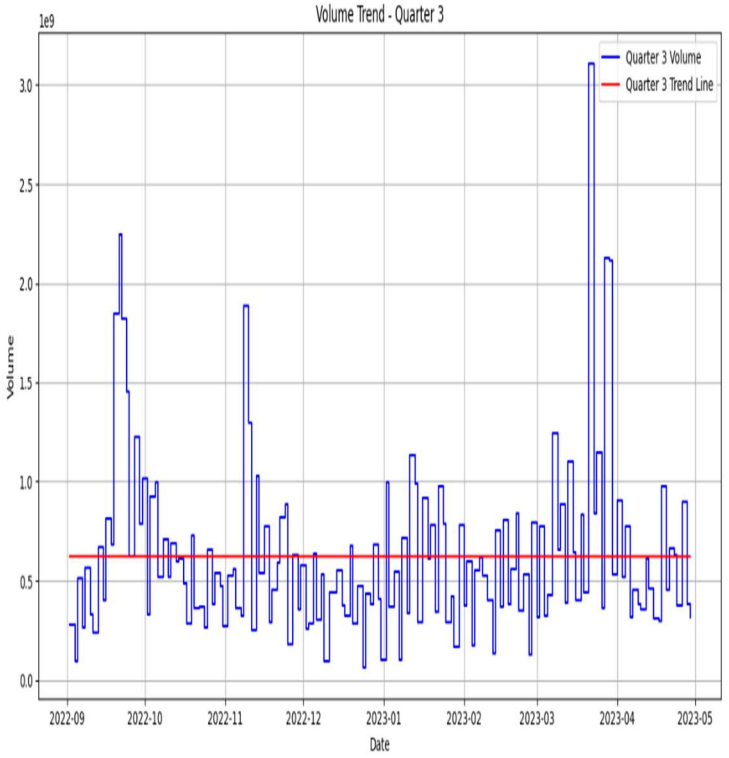
This is an analysis of prices for the entire period. From this it is observed that the price of XRP is decreasing.

2. Volume Trend

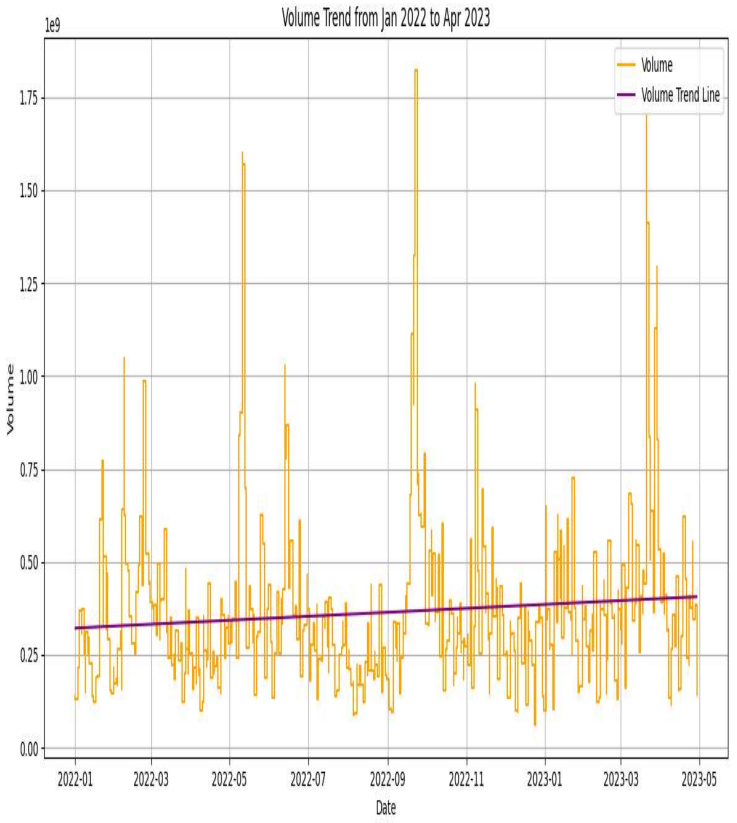




Volume trend for Q1 and Q2 is shown in the figure. By examining it we realize that the volume trend is decreasing in both Q1 and Q2. But the decreasing trend in Q2 is more compared to Q1.

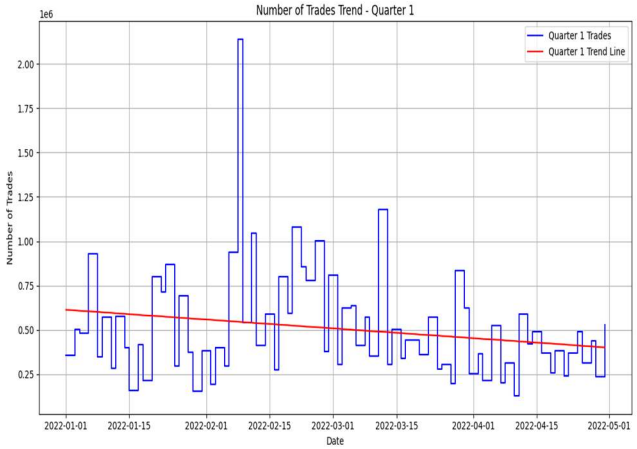


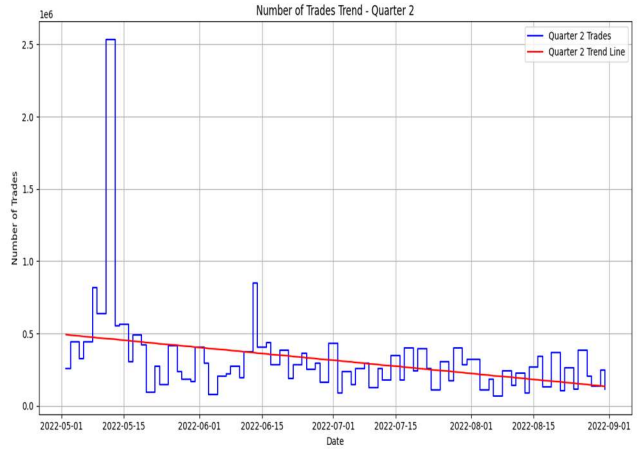
This shows the trend of volume in Q3. The trend remains almost constant.

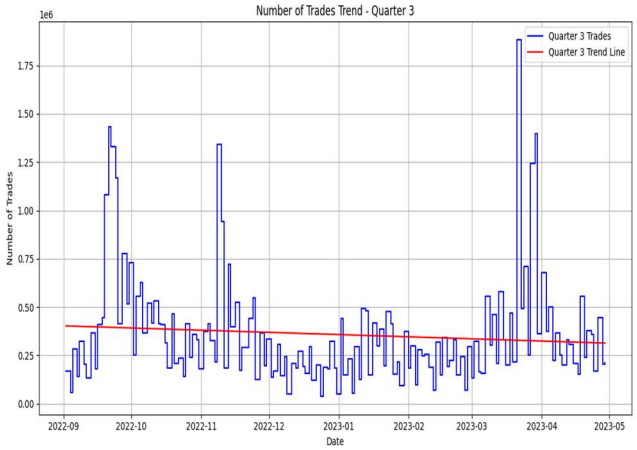


The volume trend for the entire period is given in the above figure. It is seen that the volume is having an increase throughout the period.

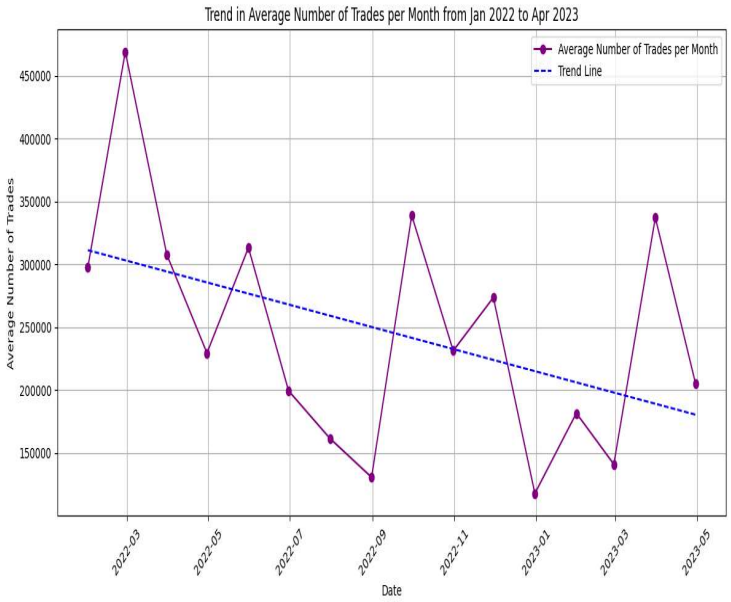
3. Number of Trades Trend







The figure shows the trend in the number of trades in Q1, Q2 and Q3. The trend is decreasing in all Q1, Q2 and Q3.



The figure shows the overall trend in the number of trades. We can see there is a decreasing trend here.

VII. MARKET RESEARCH

Market research was conducted on cryptocurrencies and the global financial order with the aim of exploring the potential of cryptocurrencies to disrupt and potentially replace the current traditional financial system. Cryptocurrencies, such as Bitcoin, Ethereum, XRP and others, have gained enormous attention and adoption in recent years, raising questions about their role in shaping global financial transactions. Based on this market research we found out several key points:

- Decentralization and financial inclusion: Cryptocurrencies run on decentralized blockchain technology, eliminating the need for intermediaries like banks and financial institutions. This feature opens

up financial services to people without a bank, allowing them to access financial transactions, payments and investments.

- Cross-border transactions: Cryptocurrencies offer a unique advantage by enabling fast and inexpensive cross-border transactions. Traditional international money transfers often have high fees and long payment times. Cryptocurrencies can facilitate seamless and instant cross-border transactions, potentially reducing reliance on traditional remittance services.
- Financial Sovereignty: Cryptocurrencies allow individuals to have greater control over their finances. With a private key, users have the right to own and control their assets without depending on a third party. This financial sovereignty is especially attractive in areas with government or banking restrictions.
- Financial innovation: The blockchain technology that underpins cryptocurrencies has spurred significant financial innovation. Decentralized finance (DeFi) platforms provide various financial services, including lending, borrowing, and yield farming, outside of the traditional banking system. These platforms have the potential to democratize access to financial products.
- Regulatory challenges: The adoption of cryptocurrencies has presented regulatory challenges to governments around the world. There is an ongoing debate about how to regulate and integrate cryptocurrencies into existing financial frameworks while ensuring consumer protection and combating illegal activities such as money laundering.
- Market volatility and maturity: The cryptocurrency market is highly volatile, with prices able to fluctuate rapidly. This volatility raises concerns about stability and predictability, especially for mainstream adoption and as a method of day-to-day financial transactions.
- Scalability and transaction speed: As cryptocurrencies grow in popularity, scalability and transaction speed become important factors. Some cryptocurrencies have difficulty processing many transactions simultaneously, leading to the risk of network congestion.
- Scalability and transaction speed: As cryptocurrencies grow in popularity, scalability and transaction speed become important factors. Some cryptocurrencies have difficulty processing many transactions simultaneously, leading to the risk of network congestion.
- Integration with traditional financial systems: For cryptocurrencies to be widely accepted and replace the current financial order, they must integrate with existing financial systems and be accepted by financial institutions, governments, and regulators.

Thus, market research on cryptocurrencies and the global financial order shows the potential to

disrupt the current financial system and provide innovative solutions for financial transactions. While cryptocurrencies offer unique advantages, they also face challenges related to regulation, scalability, volatility, and security. The future role of cryptocurrencies in the global financial order will depend on how these challenges are addressed, as well as their adoption and acceptance by institutions and traditional users worldwide.

Based on this market research we were able to find more about the impact of cryptocurrencies and the world financial order. Thereby we can provide answers to certain questions.

1. The existing financial system that we have is archaic. If there is a reversion to the gold standard and the existing financial system collapses:

-would XRP be the new global standard, backed by silver/ gold/ precious metals, especially when it is going through a lawsuit? Can the same be applied to Bitcoin?

-What are the strong indicators for Ripple and its XRP Ledger growing into a global banking system? Also, specify for bitcoin.

If the gold standard returns and the current financial system collapses, it is uncertain whether XRP or any cryptocurrency will become the new global standard backed by the precious metal. The transition to a new financial system will be a complex and unprecedented event, and many different factors will play a role in determining the outcome. While some proponents of cryptocurrencies like XRP and Bitcoin debate their potential as alternatives to traditional fiat currencies, global adoption of the crypto-powered system will require considerable consensus among governments, financial institutions and international organisations.

Regarding the lawsuit XRP is facing at the time of the market survey, this could affect its potential role in a new financial system. Legal proceedings and regulatory challenges can affect investor confidence and adoption. Similar considerations would apply to Bitcoin or any other cryptocurrency that aspires to play an important role in a restructured financial system.

Strong indicators that Ripple and its XRP ledger are evolving into a global banking system include increased acceptance of cross-border payments by financial institutions, partnerships with major players in the financial industry, and clearer regulations acceptance, and technological advances to improve efficiency and scalability of the XRP ledger. Indicators of Bitcoin may include acceptance by wider institutions, acceptance as a store of value, and continued acceptance by individuals and businesses as a digital asset.

2. What would be the major risks, exposures, and restraints within a governmental XRP/ Bitcoin Ledger banking system from the citizen’s (businesses, consumer) perspective?

From a citizen's perspective, the major risks, dangers, and limitations in the government's

XRP/Bitcoin Ledger banking system include privacy and data security, potential vulnerability to cyberattacks, concerns about price volatility of cryptocurrencies affecting savings and investments, lack of remedies in case of emergency, etc. may be included. Cyberattacks include fraudulent transactions and could increase financial exclusion if cryptocurrencies are not universally accessible or understandable to all citizens. In addition, the public may be concerned about the lack of central authority and oversight that may affect consumer protection and dispute resolution.

3. When do you predict a wealth transfer from the current system to a new system to be finalized? (i.e., old systems will no longer or insignificantly be in use/active)

Predicting the completion of the transfer of wealth from the current system to the new system is difficult and subject to many uncertainties. The transition to new financial systems, especially those based on cryptocurrencies, will depend on global economic, political and technological developments. It could take years, or even decades, before it becomes widely accepted and stabilized. As the global financial landscape evolves, older systems may coexist with newer systems for an extended period.

4. Does your research indicate the emergence of a new currency, Like BRICS led or will the dollar remain?

New currencies such as the BRICS-led currency may emerge, but the future of the dollar as the world's dominant reserve currency remains uncertain. News articles show that various countries and regional groups are exploring alternatives to the US dollar to reduce their dependence on the US dollar. New currencies backed by groups of nations such as the BRICS could be considered as alternative reserve currencies, but their success would depend on factors such as economic stability and the credibility of participating countries.

5. In an upcoming recession which market sectors, industries and niches will:

- newly emerge as they cater to specific consumer needs instead of wants.
- continue to grow alongside the usual consumer staples, while others decline?

In the upcoming recession the industries such as Healthcare and Telemedicine, Online Education and Skill Development, Essential Goods and Services will be the new emerging sectors. The industries such as Technology and E-commerce, Renewable Energy and Sustainability, Home Entertainment and Streaming Services, Discount Retailers will continue to grow alongside whereas the industries such as Luxury Goods and Travel, Non-Essential Retail, Automotive will decline.

VIII. RESULTS AND FINDINGS

- Close Price Analysis: The analysis of the close price of XRP revealed that the price

of XRP decreased during the given time period. This suggests that the overall trend of XRP`s price was bearish or downward during the analyzed timeframe. The decline in price could be attributed to various factors, such as market sentiment, regulatory developments, or macroeconomic trends. Traders and investors should pay attention to price movements and consider the broader market conditions before making decisions.

- Volume Analysis: The volume analysis indicated that the quantity of XRP traded increased during the given time period. An increase in trading volume often suggests higher market activity and interest in the assets. Higher trading volume can be influenced by various factors, such as news events, market sentiment, or institutional participation. Increased volume may signal heightened price volatility and potential price movements. Traders should be cautious and consider the implications of higher volume on their trading strategies.

- Number of Trades Analysis: The analysis of the number of trades during the period revealed a decreasing trend. A decreasing number of trades could indicate reduced market activity or less interest in actively buying and selling XRP. This decline in trading activity might be influenced by various factors, including a lack of major news developments or a wait-and-see approach by traders. Decreasing trading activity can lead to lower price volatility and potential consolidation in the market.

- The Relative Strength Index (RSI) analysis highlighted instances of overbought and oversold conditions during the period. RSI is a momentum oscillator that measures the speed and change of price movements. An RSI above 70 is considered overbought, suggesting that the asset`s price may have risen too quickly and could be due for a potential pullback. Conversely, an RSI below 30 is considered oversold, indicating that the asset's price may have declined too quickly and could be due for a potential bounce back. Identifying overbought and oversold conditions can help traders in timing their entries and exits and adjusting their trading strategies accordingly.

IX. CONCLUSION

Analysis of XRP volume, transaction count, and closing price provides valuable insights into market trends and its performance. Throughout the year, quarterly analysis shows changing trends, indicating shifts in market sentiment and investor behavior. However, when examining the full-year analysis, a notable trend emerges – XRP price descending. Several factors may have contributed to this decline, and sociopolitical

issues play an important role in shaping market dynamics.

One of the major factors influencing the price of XRP is the ongoing lawsuit by the US Securities and Exchange Commission (SEC) against Ripple Labs, the company behind XRP. The lawsuit has raised regulatory uncertainty and investor concerns, leading to lower confidence and potential sales of XRP. Additionally, geopolitical events, such as the Ukraine-Russia war, can have an indirect impact on the crypto market. Geopolitical tensions and conflicts can create economic uncertainty and impact investor sentiment, leading to risk aversion and caution towards volatile assets such as cryptocurrencies.

Additionally, war-induced inflation could also contribute to XRP's downtrend. Inflation erodes the purchasing power of fiat currencies, prompting investors to look for alternatives to protect their assets. While some investors may view cryptocurrencies as an inflation hedge, the overall impact of inflation on the market can create an atmosphere of caution and risk aversion. It is essential to realize that the cryptocurrency market is influenced by a complex interplay of various factors, including technological advancements, market sentiment, regulatory developments, and other world events. XRP's price drop may be a combination of these factors rather than being attributed to a single problem.

In addition, the long-term viability and performance of XRP and other cryptocurrencies is subject to regulatory decisions and market acceptance. As the case progresses and the geopolitical circumstances develop, investors and stakeholders in the cryptocurrency market will closely monitor developments to better understand the potential impact on the future of XRP. In summary, the declining XRP price seen in the full year analysis can be influenced by various socio-political issues, including the SEC lawsuit, geopolitical tensions, and the issue of inflation. However, the cryptocurrency market is complex and subject to many influences, it is important to approach the analysis with caution and a comprehensive understanding of the broader market dynamics.