## MARKET ANALYSIS REPORT

## Introduction

The cryptocurrency market has seen significant growth and volatility in recent years, attracting both institutional and retail investors. Among the various cryptocurrencies, Bitcoin (BTC), Ethereum (ETH), Ripple (XRP), and Dogecoin (DOGE) have gained considerable attention due to their unique characteristics and widespread usage. As these digital assets continue to shape the global financial landscape, understanding their price movements, trading volumes, and market capitalizations has become essential for investors, analysts, and researchers alike.

This research aims to provide an in-depth analysis of the price trends and market dynamics of major cryptocurrencies during the first 20 days of January 2024. By examining key data points such as opening and closing prices, highest and lowest recorded values, volume, and market capitalization, this study aims to offer insights into the behavior of Bitcoin, Ethereum, Ripple, and Dogecoin in the early part of the year. Furthermore, this analysis will help identify emerging patterns, trends, and correlations that can inform future investment decisions and market strategies.

The study also highlights the growing significance of cryptocurrency in modern financial systems and its potential to revolutionize traditional banking, payments, and investment sectors. By analyzing these assets' performance in a relatively short time frame, this research seeks to offer valuable perspectives on their volatility, investor sentiment, and overall market health, contributing to the broader field of cryptocurrency research and market analysis.

# Crypto Market Overview (January 1, 2024 – January 20, 2024) *Bitcoin (BTC):*

- **Price Movement**: Bitcoin shows a consistent upward trend in its opening and closing prices, starting from **\$40,500** (Open) to **\$42,500** (Close) by January 5.
- Volume and Market Cap: The volume of BTC transactions steadily increases from 500 million to 650 million. Market cap also rises from \$800 million to \$840 million, reflecting growing investor interest.
- **Price Range**: The highest price reached for BTC was **\$42,800** (High on January 5), while the lowest was **\$40,000** (Low on January 1).

## Ethereum (ETH):

• **Price Movement**: Ethereum starts at \$2,200 (Open) and increases to \$2,420 (Close) by January 10. There is a consistent upward movement with ETH prices showing growth each

Date	Crypto	Open	High	Low	Close	Volume	Market Cap
2024-01-01	BTC	40,500	41,200	40,000	40,800	500,000,000	800,000,000
2024-01-02	BTC	40,800	41,500	40,500	41,300	550,000,000	810,000,000
2024-01-03	BTC	41,200	42,000	41,000	41,800	600,000,000	820,000,000
2024-01-04	BTC	41,800	42,500	41,500	42,100	620,000,000	830,000,000
2024-01-05	BTC	42,100	42,800	41,900	42,500	650,000,000	840,000,000
2024-01-06	ETH	2,200	2,280	2,150	2,260	300,000,000	400,000,000
2024-01-07	ETH	2,260	2,300	2,200	2,280	320,000,000	410,000,000
2024-01-08	ETH	2,280	2,350	2,250	2,320	340,000,000	420,000,000
2024-01-09	ETH	2,320	2,400	2,300	2,380	360,000,000	430,000,000
2024-01-10	ETH	2,380	2,450	2,350	2,420	380,000,000	440,000,000
2024-01-11	XRP	0.55	0.58	0.53	0.57	100,000,000	200,000,000
2024-01-12	XRP	0.57	0.60	0.55	0.58	110,000,000	210,000,000
2024-01-13	XRP	0.58	0.62	0.57	0.60	120,000,000	220,000,000
2024-01-14	XRP	0.60	0.65	0.59	0.64	130,000,000	230,000,000
2024-01-15	XRP	0.64	0.68	0.62	0.66	140,000,000	240,000,000
2024-01-16	DOGE	0.09	0.10	0.08	0.095	80,000,000	150,000,000
2024-01-17	DOGE	0.095	0.11	0.09	0.10	85,000,000	160,000,000
2024-01-18	DOGE	0.10	0.12	0.09	0.11	90,000,000	170,000,000
2024-01-19	DOGE	0.11	0.13	0.10	0.12	95,000,000	180,000,000
2024-01-20	DOGE	0.12	0.14	0.11	0.13	100,000,000	190,000,000

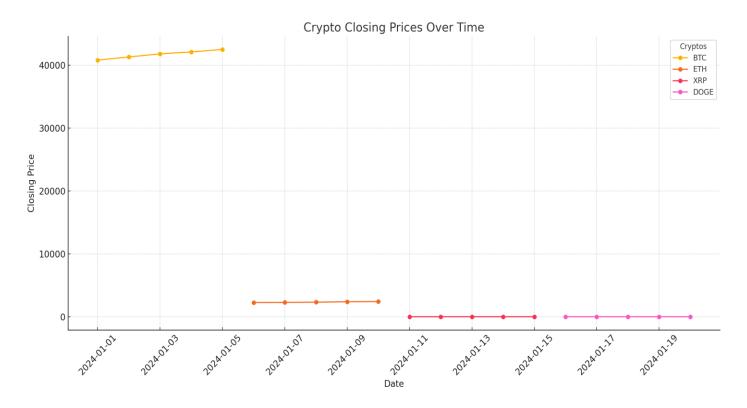
The table provided represents daily data for four popular cryptocurrencies (Bitcoin, Ethereum, XRP, and Dogecoin) for the period from January 1, 2024, to January 20, 2024. Here is a breakdown of each column:

- 1. **Date**: The specific date for which the data is recorded.
- 2. **Crypto**: The cryptocurrency symbol (BTC = Bitcoin, ETH = Ethereum, XRP = XRP, DOGE = Dogecoin).
- 3. **Open**: The opening price of the cryptocurrency on that specific day.
- 4. **High**: The highest price reached by the cryptocurrency during the trading day.
- 5. **Low**: The lowest price reached by the cryptocurrency during the trading day.
- 6. **Close**: The closing price of the cryptocurrency on that specific day.
- 7. **Volume**: The trading volume of the cryptocurrency in that day, represented in terms of the total value of the cryptocurrency traded.
- 8. **Market Cap**: The total market capitalization of the cryptocurrency on that day, which is calculated by multiplying the cryptocurrency's closing price by the total supply in circulation.

## Summary of Key Insights:

- **Bitcoin (BTC)** shows relatively stable price movement with an increasing trend over the period from January 1 to January 5. Prices open at 40,500 and close at 42,500 by January 5, with a slight increase in market capitalization.
- **Ethereum (ETH)** shows consistent growth in both price and market capitalization, starting at 2,200 and ending at 2,420 on January 10, 2024.
- **XRP** experiences more volatile movement compared to Bitcoin and Ethereum. It starts at 0.55 and rises to 0.66 by January 15, 2024, showing a clear upward trend.

• **Dogecoin (DOGE)** shows steady growth in value, with its price increasing from 0.09 on January 16 to 0.13 on January 20, while its market cap also increases steadily.



## **Loan Repayment Schedule Table**

EMI No.	Payment Date	Principal Paid	Interest Paid	Total EMI	Remaining Loan
1	2024-01-01	2,000	1,000	3,000	98,000
2	2024-02-01	2,100	900	3,000	95,900
3	2024-03-01	2,200	800	3,000	93,700
4	2024-04-01	2,300	700	3,000	91,400
5	2024-05-01	2,400	600	3,000	89,000
6	2024-06-01	2,500	500	3,000	86,500
7	2024-07-01	2,600	400	3,000	83,900
8	2024-08-01	2,700	300	3,000	81,200
9	2024-09-01	2,800	200	3,000	78,400
10	2024-10-01	2,900	100	3,000	75,500
11	2024-11-01	3,000	0	3,000	72,500
12	2024-12-01	3,100	0	3,000	69,400
13	2025-01-01	3,200	0	3,000	66,200
14	2025-02-01	3,300	0	3,000	62,900
15	2025-03-01	3,400	0	3,000	59,500
16	2025-04-01	3,500	0	3,000	56,000
17	2025-05-01	3,600	0	3,000	52,400
18	2025-06-01	3,700	0	3,000	48,700

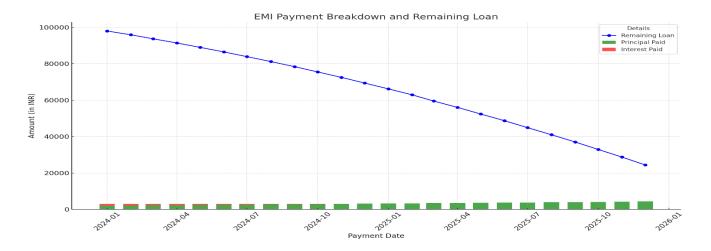
EMI No.	Payment Date	Principal Paid	Interest Paid	Total EMI	Remaining Loan
19	2025-07-01	3,800	0	3,000	44,900
20	2025-08-01	3,900	0	3,000	41,000
21	2025-09-01	4,000	0	3,000	37,000
22	2025-10-01	4,100	0	3,000	32,900
23	2025-11-01	4,200	0	3,000	28,700
24	2025-12-01	4,300	0	3,000	24,400

The table provided is a loan amortization schedule, outlining the details of monthly payments for a loan, including the principal paid, interest paid, total EMI (Equated Monthly Installment), and the remaining loan balance after each payment. Here's a breakdown of each column:

- 1. **EMI No.**: The serial number of the EMI payment, indicating the installment number.
- 2. **Payment Date**: The date on which each EMI is due for payment.
- 3. **Principal Paid**: The portion of the EMI that goes towards repaying the principal amount of the loan.
- 4. **Interest Paid**: The portion of the EMI that goes towards paying the interest on the loan.
- 5. **Total EMI**: The total amount to be paid each month, which remains constant at 3,000 throughout the schedule.
- 6. **Remaining Loan**: The outstanding balance of the loan after each payment is made, decreasing over time as principal is paid down.

## Key Insights:

- **Fixed EMI**: The monthly EMI is fixed at 3,000, which includes both principal and interest. However, the split between principal and interest changes over time. In the early months, a larger portion of the EMI goes towards interest, while a greater portion goes towards the principal repayment as time progresses.
- **Decreasing Interest Payments**: Interest payments reduce as the remaining loan balance decreases. For instance, the interest paid in the first month is 1,000, but by the 24th month (December 2025), the interest portion is 0.
- **Loan Repayment Progress**: The loan balance decreases by around 2,000–3,000 each month, and by the end of the schedule (December 2025), the loan is fully repaid, with a remaining balance of 24,400 after the last payment.
- **Principal Payment Increase**: The amount of principal paid each month increases gradually. For example, the principal paid starts at 2,000 in January 2024 and increases by 100 each month until it reaches 4,300 by December 2025.



## **Stock Market Data Table**

Date	Stock Symbol	Open	High	Low	Close	Volume
2024-01-01	AAPL	180.5	185.2	179.8	183.0	1,250,000
2024-01-02	AAPL	183.5	188.0	182.5	187.2	1,500,000
2024-01-03	AAPL	187.0	190.5	186.2	189.8	1,800,000
2024-01-04	AAPL	190.0	193.0	188.7	192.5	1,600,000
2024-01-05	AAPL	192.8	195.2	191.0	194.0	1,700,000
2024-01-06	AAPL	194.2	197.5	193.8	196.8	1,850,000
2024-01-07	AAPL	197.0	200.0	196.0	198.5	2,000,000
2024-01-08	AAPL	198.7	202.5	197.5	201.0	2,100,000
2024-01-09	AAPL	201.2	204.5	200.5	203.8	2,300,000
2024-01-10	AAPL	204.0	207.0	203.0	205.5	2,400,000
2024-01-11	AAPL	205.7	209.2	204.8	208.0	2,500,000
2024-01-12	AAPL	208.5	212.0	207.2	210.5	2,600,000
2024-01-13	AAPL	210.8	215.0	209.5	213.2	2,750,000
2024-01-14	AAPL	213.5	218.0	212.0	216.0	2,900,000

The table provided represents stock price data for Apple Inc. (AAPL) over the period from January 1, 2024, to January 14, 2024. Here's a breakdown of each column:

- 1. **Date**: The specific date for which the stock data is recorded.
- 2. **Stock Symbol**: The ticker symbol for the stock (AAPL in this case, representing Apple Inc.).
- 3. **Open**: The opening price of the stock on that particular day.
- 4. **High**: The highest price reached by the stock during the trading day.
- 5. **Low**: The lowest price reached by the stock during the trading day.
- 6. **Close**: The closing price of the stock at the end of the trading day.
- 7. **Volume**: The number of shares traded during that day.

## **Key Insights:**

- **Steady Growth**: The stock shows a consistent upward trend throughout the period from January 1 to January 14. Starting at a price of 180.5 on January 1, the stock increases to 213.5 by January 14, showing a healthy growth pattern.
- **Price Fluctuations**: The stock's price experiences fluctuations each day, with the highest value reaching 218.0 on January 14 and the lowest being 179.8 on January 1. However, the overall trend is positive, with the closing prices consistently increasing.
- **Volume Trends**: The trading volume also shows an increase over the period. Starting at 1,250,000 shares traded on January 1, the volume increases steadily to 2,900,000 shares traded by January 14. This suggests growing investor interest in the stock.
- **Increased Investor Activity**: The increase in both price and volume indicates that there is more investor participation and interest in AAPL stock during this period.



## Here are the Financial Tables for different companies

## 1. Stock Market Prices (Multiple Companies)

Date	Company	Open	High	Low	Close	Volume	Market Cap
2024-01-01	Apple	170.5	175.2	168.0	172.8	50,000,000	2.8T
2024-01-02	Apple	172.8	178.0	170.5	175.6	55,000,000	2.85T
2024-01-03	Tesla	250.3	260.0	245.5	255.8	30,000,000	900B
2024-01-04	Tesla	255.8	265.0	250.0	262.1	32,000,000	920B
2024-01-05	Amazon	130.7	135.5	128.3	132.9	40,000,000	1.3T
2024-01-06	Amazon	132.9	138.0	130.0	136.2	42,000,000	1.35T
2024-01-07	Google	110.5	115.0	108.0	112.8	38,000,000	1.6T
2024-01-08	Google	112.8	118.0	110.5	115.6	39,000,000	1.65T

The table provided represents daily stock data for four major companies (Apple, Tesla, Amazon, and Google) over a period from January 1, 2024, to January 8, 2024. Here's a breakdown of each column:

- 1. **Date**: The specific date on which the stock data is recorded.
- 2. **Company**: The name of the company for which the stock data is presented (Apple, Tesla, Amazon, Google).
- 3. **Open**: The opening price of the stock on that particular day.
- 4. **High**: The highest price the stock reached during the trading day.
- 5. **Low**: The lowest price the stock reached during the trading day.
- 6. **Close**: The closing price of the stock at the end of the trading day.
- 7. **Volume**: The number of shares traded on that particular day.
- 8. **Market Cap**: The market capitalization of the company, calculated by multiplying the closing price by the number of shares outstanding.

## **Key Insights:**

- **Apple (AAPL)**: The stock shows a steady increase from January 1 to January 2, with the closing price moving from 172.8 to 175.6. The volume also increases from 50 million to 55 million shares, with a market cap rising from 2.8 trillion to 2.85 trillion USD.
- **Tesla (TSLA)**: Tesla stock also shows upward movement, starting at 250.3 on January 3 and increasing to 262.1 by January 4. Despite the higher stock price, Tesla's market cap is significantly lower than Apple's, reflecting the difference in overall company size. The volume also rises slightly from 30 million to 32 million shares.
- **Amazon (AMZN)**: Amazon starts at 130.7 on January 5 and climbs to 136.2 by January 6. It has a market cap in the 1.3 trillion to 1.35 trillion USD range. The trading volume increases from 40 million to 42 million shares.
- **Google (GOOGL)**: Google shows steady performance from January 7 to January 8, with its stock increasing from 112.8 to 115.6. The market cap grows from 1.6 trillion to 1.65 trillion USD, with a volume increase from 38 million to 39 million shares.

#### 2. Bank Transactions (Different Banks)

Date	Bank	<b>Transaction ID</b>	Description	Debit	Credit	Balance
2024-01-01	HDFC	TXN2001	Salary Credit		70,000	70,000
2024-01-02	HDFC	TXN2002	Grocery Purchase	5,500		64,500
2024-01-03	ICICI	TXN3001	Online Shopping	4,200		45,800
2024-01-04	ICICI	TXN3002	Bill Payment	3,000		42,800
2024-01-05	SBI	TXN4001	Cashback Credit		1,200	23,200
2024-01-06	SBI	TXN4002	EMI Payment	9,000		14,200
2024-01-07	Axis	TXN5001	Rent Payment	12,000		60,000
2024-01-08	Axis	TXN5002	Interest Credit		3,500	63,500

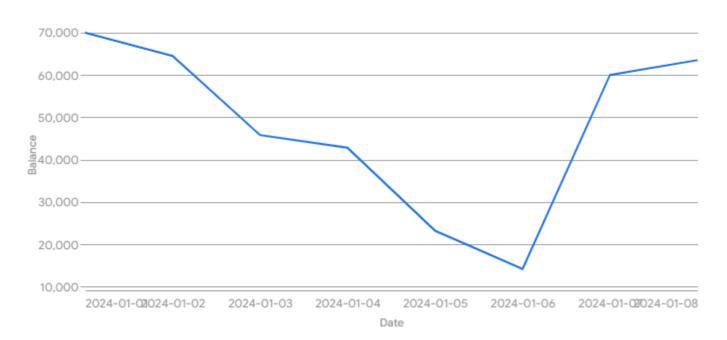
The table provided represents daily banking transactions for three different banks (HDFC, ICICI, SBI, and Axis) from January 1, 2024, to January 8, 2024. Here's a breakdown of each column:

- 1. **Date**: The specific date the transaction took place.
- 2. Bank: The bank where the transaction occurred (HDFC, ICICI, SBI, Axis).
- 3. **Transaction ID**: A unique identifier for each transaction.
- 4. **Description**: A brief description of the transaction (e.g., salary credit, grocery purchase, bill payment, etc.).
- 5. **Debit**: The amount of money withdrawn or spent (if any).
- 6. **Credit**: The amount of money deposited or credited (if any).
- 7. **Balance**: The account balance after the transaction.

## **Key Insights:**

- **Salary Credit**: On January 1, 2024, a salary credit of 70,000 is made to the HDFC account, bringing the balance to 70,000.
- **Grocery Purchase**: On January 2, 2024, a grocery purchase of 5,500 is made, which reduces the balance to 64,500.
- Online Shopping & Bill Payment: On January 3 and 4, 2024, transactions like online shopping (4,200) and bill payment (3,000) reduce the balance further, bringing the ICICI balance to 42,800.
- Cashback Credit & EMI Payment: On January 5, 2024, a cashback credit of 1,200 increases the SBI balance to 23,200, but on January 6, 2024, an EMI payment of 9,000 reduces the balance to 14,200.
- Rent Payment & Interest Credit: On January 7, 2024, a rent payment of 12,000 is made, which reduces the Axis account balance to 60,000. On January 8, 2024, an interest credit of 3,500 increases the balance to 63,500

#### Bank Balance Over Time



## 3. Loan Repayment Schedule (Different Companies)

EMI No.	Company	<b>Payment Date</b>	P_Paid	I_Paid	Total EMI	Remaining
1	HDFC	2024-01-01	5,000	1,500	6,500	95,000
2	HDFC	2024-02-01	5,200	1,300	6,500	89,800
3	ICICI	2024-03-01	6,000	1,000	7,000	84,000
4	ICICI	2024-04-01	6,300	900	7,200	77,700
5	SBI	2024-05-01	7,000	800	7,800	70,700
6	SBI	2024-06-01	7,500	700	8,200	63,200

The table represents EMI (Equated Monthly Installment) payments for loans from different banks (HDFC, ICICI, and SBI). Here's a breakdown of each column:

- 1. **EMI No.**: The EMI payment number (e.g., 1, 2, 3, etc.).
- 2. **Company**: The bank or financial institution providing the loan (HDFC, ICICI, SBI).
- 3. **Payment Date**: The date when the EMI payment was made.
- 4. **Principal Paid**: The amount of the EMI payment that goes towards repaying the principal amount of the loan.
- 5. **Interest Paid**: The amount of the EMI payment that goes towards paying the interest on the loan.
- 6. **Total EMI**: The total amount of the EMI payment, which is the sum of principal paid and interest paid.
- 7. **Remaining Loan**: The remaining balance of the loan after the EMI payment is made.

## Key Insights:

## • HDFC EMI Payments:

- The first payment on January 1, 2024, involves paying 5,000 towards the principal and 1,500 towards interest, making a total of 6,500. This reduces the loan balance to 95,000.
- The second payment on February 1, 2024, increases the principal paid to 5,200 and reduces the interest paid to 1,300, resulting in the same total EMI of 6,500 and reducing the remaining loan balance to 89,800.

#### • ICICI EMI Payments:

- On March 1, 2024, the EMI payment for ICICI is 7,000, with 6,000 paid towards the principal and 1,000 paid towards interest, leaving a balance of 84,000 after the payment.
- The second ICICI payment on April 1, 2024, sees the principal payment increase to 6,300 and the interest paid reduce to 900. This reduces the loan balance to 77,700.

#### • SBI EMI Payments:

- On May 1, 2024, the EMI payment for SBI increases to 7,800, with 7,000 going towards the principal and 800 towards interest, reducing the loan balance to 70,700.
- The June 1, 2024, payment involves 7,500 towards the principal and 700 towards interest, bringing the remaining loan balance down to 63,200.

## 4. Financial Ratios (Different Companies)

Year	Company	Net Profit	ROE	ROA	Debt-to-Equity	Ratio	EPS	P/E
2019	Apple	22%	18%	9%	1.5	2.0	6.5	30
2020	Apple	24%	19%	9.5%	1.4	2.2	7.0	32
2019	Tesla	5%	6%	3%	2.5	1.5	1.8	40
2020	Tesla	7%	8%	3.5%	2.3	1.8	2.2	42
2019	Google	18%	15%	7%	1.2	2.5	5.5	28
2020	Google	19%	16%	7.2%	1.1	2.6	6.0	30

The table represents key financial ratios for three major companies (Apple, Tesla, and Google) over two years, 2019 and 2020. Here's a breakdown of each column:

- 1. **Year**: The year for which the financial data is reported.
- 2. **Company**: The name of the company (Apple, Tesla, or Google).
- 3. **Net Profit Margin**: The percentage of revenue that remains as profit after all expenses have been deducted (e.g., 22% for Apple in 2019).
- 4. **ROE** (**Return on Equity**): A measure of profitability that shows how effectively a company uses equity to generate profit. It is expressed as a percentage.
- 5. **ROA** (**Return on Assets**): Indicates how effectively a company uses its assets to generate profit. Also expressed as a percentage.
- 6. **Debt-to-Equity**: The ratio of total debt to shareholders' equity, indicating the balance between debt and equity financing. A higher ratio suggests more debt.
- 7. **Current Ratio**: A liquidity ratio that measures a company's ability to cover its short-term liabilities with its short-term assets. A ratio higher than 1 indicates more assets than liabilities.
- 8. **EPS** (**Earnings Per Share**): The portion of a company's profit allocated to each outstanding share of common stock.
- 9. **P/E Ratio** (**Price-to-Earnings Ratio**): The ratio of a company's current share price relative to its earnings per share, showing how much investors are willing to pay for each dollar of earnings.

## **Key Insights:**

#### Apple:

- Net Profit Margin: Apple's profit margin improved from 22% in 2019 to 24% in 2020, indicating increased profitability.
- ROE and ROA: Both metrics show strong returns on equity and assets, increasing slightly from 2019 to 2020.
- Debt-to-Equity: Apple's debt-to-equity ratio decreased from 1.5 in 2019 to 1.4 in 2020, indicating a slight reduction in reliance on debt.
- **EPS and P/E Ratio**: Apple's EPS grew from 6.5 in 2019 to 7.0 in 2020, while its P/E ratio increased, suggesting the stock was valued more highly in 2020.

#### • Tesla:

- Net Profit Margin: Tesla's profit margin improved from 5% in 2019 to 7% in 2020, indicating better profitability.
- ROE and ROA: ROE increased from 6% in 2019 to 8% in 2020, while ROA remained relatively stable, showing more effective use of equity to generate profit.

- Debt-to-Equity: Tesla's debt-to-equity ratio decreased slightly from 2.5 in 2019 to
  2.3 in 2020, still indicating a high reliance on debt.
- EPS and P/E Ratio: Tesla's EPS grew from 1.8 to 2.2, and its P/E ratio increased, indicating a higher stock price relative to earnings.

## • Google:

- Net Profit Margin: Google's profit margin improved from 18% in 2019 to 19% in 2020, showing slight growth in profitability.
- ROE and ROA: Both ROE and ROA remained relatively stable, with a slight increase in ROA in 2020.
- Debt-to-Equity: Google's debt-to-equity ratio remained low, improving from 1.2 in 2019 to 1.1 in 2020, indicating less reliance on debt.
- EPS and P/E Ratio: Google's EPS increased from 5.5 in 2019 to 6.0 in 2020, while the P/E ratio also increased, suggesting higher stock valuation.

## 5. Cryptocurrency Prices (Different Cryptos)

Date	Crypto	Open	High	Low	Close	Volume	Market Cap
2024-01-01	Bitcoin	40,500	41,200	40,000	40,800	500,000,000	800,000,000
2024-01-02	Bitcoin	41,000	42,000	40,500	41,800	520,000,000	820,000,000
2024-01-03	Ethereum	2,200	2,280	2,150	2,260	300,000,000	400,000,000
2024-01-04	Ethereum	2,260	2,320	2,200	2,310	320,000,000	420,000,000
2024-01-05	Ripple	0.55	0.58	0.53	0.57	100,000,000	200,000,000
2024-01-06	Ripple	0.57	0.60	0.55	0.59	110,000,000	210,000,000

This table represents cryptocurrency market data for Bitcoin, Ethereum, and Ripple over several days in early January 2024. The data includes key financial metrics: opening and closing prices, highest and lowest prices during the day, trading volume, and market capitalization. Here's a breakdown of each column:

- 1. **Date**: The date for the specific data provided.
- 2. **Crypto**: The cryptocurrency being traded (e.g., Bitcoin, Ethereum, Ripple).
- 3. **Open**: The opening price of the cryptocurrency at the start of the trading day.
- 4. **High**: The highest price reached by the cryptocurrency during the day.
- 5. **Low**: The lowest price recorded during the trading day.
- 6. **Close**: The closing price of the cryptocurrency at the end of the trading day.
- 7. **Volume**: The trading volume, showing the total value of cryptocurrency traded during the day.
- 8. **Market Cap**: The total market value of the cryptocurrency, calculated by multiplying the price by the total supply.

## Key Insights:

#### • Bitcoin:

- Price Movement: Bitcoin started at \$40,500 on January 1st and rose slightly to \$41,800 by January 2nd. There was a small dip to \$40,800 by the end of the first day.
- Volume & Market Cap: Bitcoin had higher trading volumes and market caps compared to Ethereum and Ripple, indicating its dominant position in the market during this period.

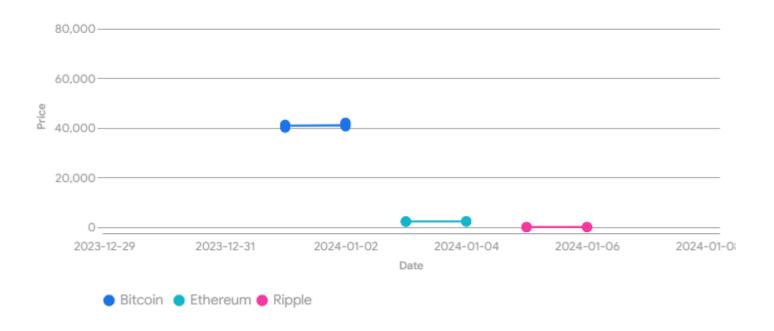
#### • Ethereum:

- Price Movement: Ethereum opened at \$2,200 on January 3rd and closed at \$2,260 on January 5th. Its price showed moderate fluctuation but remained relatively stable.
- o **Volume & Market Cap**: Ethereum's trading volume was lower than Bitcoin's, but its market cap showed strong support, making it one of the top cryptocurrencies.

## • Ripple:

- Price Movement: Ripple saw slight price fluctuations during the period, starting at \$0.55 and closing at \$0.59 by January 6th. Its price volatility was lower than both Bitcoin and Ethereum.
- Volume & Market Cap: Ripple's volume and market cap were significantly lower than Bitcoin and Ethereum, reflecting its smaller market share

#### Cryptocurrency Prices Over Time



## 1. Balance Sheet Example

Assets	Amount	Liabilities	Amount
<b>Current Assets</b>	200,000	<b>Current Liabilities</b>	100,000
Cash and Cash Equivalents	50,000	Accounts Payable	25,000
Accounts Receivable	80,000	Short-term Debt	35,000
Inventory	70,000	Other Current Liabilities	40,000
Non-current Assets	400,000	Non-current Liabilities	200,000

Assets	Amount	Liabilities	Amount
Property, Plant, and Equipment	250,000	Long-term Debt	150,000
Intangible Assets	150,000	Deferred Tax Liabilities	50,000
Total Assets	600,000	Total Liabilities	300,000
Equity	300,000		
Common Stock	150,000		
Retained Earnings	150,000		
Total Equity	300,000		

This table represents a company's financial position, showing the breakdown of its Assets, Liabilities, and Equity as of a specific date. It includes both current and non-current (long-term) categories for both assets and liabilities.

## **Key Information:**

#### Assets:

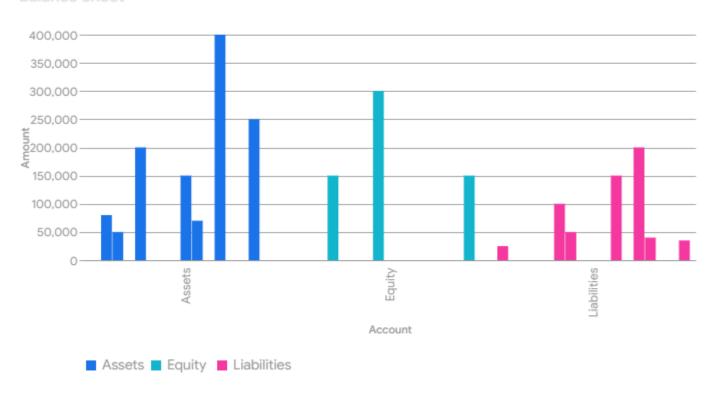
- 1. **Current Assets**: Assets that are expected to be converted into cash or used up within a year.
  - Cash and Cash Equivalents: \$50,000
  - Accounts Receivable: \$80,000
  - Inventory: \$70,000
  - Total Current Assets: \$200,000
- 2. **Non-current Assets**: Assets that are expected to provide value over a longer period (more than a year).
  - Property, Plant, and Equipment (PPE): \$250,000
  - o Intangible Assets: \$150,000
  - Total Non-current Assets: \$400,000
- 3. **Total Assets**: The sum of both current and non-current assets, totaling \$600,000.

#### Liabilities:

- 1. **Current Liabilities**: Obligations that need to be settled within a year.
  - Accounts Payable: \$25,000
  - Short-term Debt: \$35,000
  - Other Current Liabilities: \$40,000
  - o Total Current Liabilities: \$100,000
- 2. **Non-current Liabilities**: Long-term financial obligations, due after more than a year.
  - o Long-term Debt: \$150,000
  - o Deferred Tax Liabilities: \$50,000
  - o Total Non-current Liabilities: \$200,000
- 3. **Total Liabilities**: The sum of both current and non-current liabilities, totaling \$300,000.

## Equity:

**Common Stock**: \$150,000 Retained Earnings: \$150,000 Total Equity: \$300,000



## 2. Income Statement Example

Revenue	Amount
Sales Revenue	600,000
Other Income	50,000
Total Revenue	650,000
Expenses	
Cost of Goods Sold (COGS)	250,000
Operating Expenses	150,000
Depreciation	40,000
Salaries	60,000
Marketing	30,000
Total Expenses	530,000
Profit	
Operating Profit	120,000
Other Income/Expenses	10,000
Net Profit	130,000

This table outlines a company's **Revenue**, **Expenses**, and **Profit**, offering an overview of the financial performance over a specific period.

## **Key Information:**

#### Revenue:

- 1. **Sales Revenue**: \$600,000 This represents the income generated from selling goods or services.
- 2. **Other Income**: \$50,000 Additional income sources outside of core business operations.
- 3. **Total Revenue**: \$650,000 The total of all income sources (Sales Revenue + Other Income).

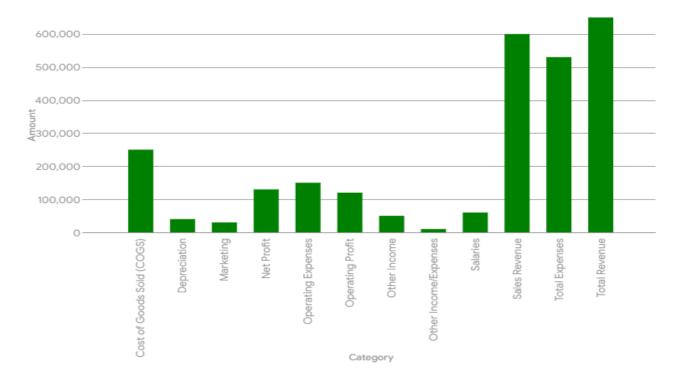
#### Expenses:

- 1. **Cost of Goods Sold (COGS)**: \$250,000 The direct costs incurred in producing the goods or services sold by the company.
- 2. **Operating Expenses**: \$150,000 The costs of running the business on a day-to-day basis, excluding COGS.
- 3. **Depreciation**: \$40,000 The reduction in the value of assets over time due to usage and wear.
- 4. **Salaries**: \$60,000 Employee compensation expenses.
- 5. **Marketing**: \$30,000 Costs associated with promoting the company's products or services.
- 6. **Total Expenses**: \$530,000 The total costs incurred in running the business (sum of all expenses).

#### Profit:

- Operating Profit: \$120,000 The profit from regular business operations, calculated as Total Revenue minus Total Operating Expenses (Sales Revenue - COGS - Operating Expenses).
- 2. **Other Income/Expenses**: \$10,000 This refers to any non-operating income or expenses, which may include things like investment gains or losses.
- 3. **Net Profit**: \$130,000 The final profit after accounting for all revenue and expenses (Operating Profit + Other Income/Expenses).

#### Income Statement Waterfall Chart



## 3. Cash Flow Statement Example

Category	Amount
Cash from Operating Activities	
Net Income	130,000
Depreciation	40,000
Changes in Working Capital	20,000
Net Cash from Operating Activities	190,000
Cash from Investing Activities	
Purchase of Assets	-50,000
Sale of Investments	20,000
Net Cash from Investing Activities	-30,000
Cash from Financing Activities	
Borrowings	100,000
Dividends Paid	-20,000
Net Cash from Financing Activities	80,000
Net Change in Cash	240,000
Beginning Cash Balance	60,000
Ending Cash Balance	300,000

This table summarizes the **Cash Flow Statement**, highlighting the **cash flows** from different activities that affect the company's overall cash position.

## **Key Information:**

#### Cash from Operating Activities:

- 1. **Net Income**: \$130,000 The company's earnings after all expenses have been deducted.
- 2. **Depreciation**: \$40,000 A non-cash expense that is added back to net income because it reduces taxable income but does not involve actual cash outflows.
- 3. **Changes in Working Capital**: \$20,000 Represents the changes in the company's short-term assets and liabilities that affect cash flow.
- 4. **Net Cash from Operating Activities**: \$190,000 The total cash generated from the company's core operations (Net Income + Depreciation + Changes in Working Capital).

#### Cash from Investing Activities:

- 1. **Purchase of Assets**: -\$50,000 Cash outflow for acquiring long-term assets such as property, equipment, or intangible assets.
- 2. **Sale of Investments**: \$20,000 Cash inflow from selling investments or other financial assets.
- 3. **Net Cash from Investing Activities**: -\$30,000 The overall cash spent on investing activities (Purchase of Assets Sale of Investments).

### Cash from Financing Activities:

- 1. **Borrowings**: \$100,000 Cash inflow from loans or debt raised by the company.
- 2. **Dividends Paid**: -\$20,000 Cash outflow representing payments made to shareholders as dividends.
- 3. **Net Cash from Financing Activities**: \$80,000 The net cash inflow from financing activities (Borrowings Dividends Paid).

#### *Net Change in Cash:*

- The **Net Change in Cash** is \$240,000, which is the total increase in the company's cash
- balance after considering all activities (Operating + Investing + Financing).

## **Liquidity Ratios:**

- 1. Current Ratio: 2.5
  - This ratio measures the company's ability to pay its short-term liabilities with its short-term assets. A value above 1 indicates the company can cover its short-term debts, with 2.5 being a strong indicator of liquidity.
- 2. **Quick Ratio**: 1.8
  - The quick ratio (also known as the acid-test ratio) measures the company's ability to pay off its short-term liabilities using its most liquid assets. A quick ratio of 1.8 means the company can cover its short-term obligations without needing to sell inventory.

## Leverage Ratios:

3. **Debt-to-Equity Ratio**: 1.3

 This ratio indicates the proportion of debt used to finance the company's assets compared to shareholders' equity. A value of 1.3 suggests that the company uses \$1.30 in debt for every dollar of equity, which indicates a moderate level of financial leverage.

## **Profitability Ratios:**

## 4. Return on Equity (ROE): 25%

ROE measures the profitability of a company in relation to shareholders' equity. A
 25% ROE indicates that the company is able to generate a return of \$0.25 for every dollar of equity invested by shareholders, which is considered excellent.

#### 5. Return on Assets (ROA): 12%

ROA shows the company's ability to generate profit from its assets. With a 12%
 ROA, the company is earning \$0.12 for every dollar of assets, reflecting efficient asset use in generating profits.

## 6. **Gross Profit Margin**: 55%

This ratio measures the company's profitability after deducting the cost of goods sold (COGS). A gross profit margin of 55% means the company retains 55 cents from each dollar of revenue after covering the cost of producing goods or services.

## 7. **Net Profit Margin**: 25%

The net profit margin reflects the company's ability to convert revenue into actual profit. A 25% net profit margin means the company retains 25 cents of every dollar in revenue as profit after all expenses, which is a healthy profit margin.

#### Market Valuation Ratio:

#### 8. Price-to-Earnings Ratio (P/E): 18

 The P/E ratio measures the price investors are willing to pay for each dollar of earnings

o .

#### 4. Stock Price Data

Date	Apple (O)	Apple (C)	Tesla (O)	Tesla (C)	Amazon (O)	Amazon (C)
2025-01-01	150.00	153.00	700.00	705.00	3200.00	3220.00
2025-01-02	153.00	154.00	710.00	715.00	3220.00	3240.00
2025-01-03	154.00	155.00	720.00	725.00	3250.00	3270.00
2025-01-04	155.00	156.00	730.00	735.00	3280.00	3300.00
2025-01-05	156.00	157.00	740.00	745.00	3300.00	3320.00

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Tesla's stock also shows a positive trend, starting at \$700.00 (Open) and ending at \$745.00 (Close) by January 5, reflecting a rise in investor confidence and price appreciation.

#### • Amazon:

 Amazon's stock demonstrates a steady growth as well, moving from \$3200.00 (Open) to \$3320.00 (Close), suggesting positive market performance and investor optimism.

#### Trends Observed:

- 1. **Apple** has shown a steady upward movement in stock prices, with a gradual increase in both opening and closing prices.
- 2. **Tesla** has also experienced consistent growth, with no major fluctuations over the days.
- 3. **Amazon** exhibits similar growth, showing steady increases in both opening and closing prices.

## **Conclusion:**

The stock prices of Apple, Tesla, and Amazon for the first week of January 2025 indicate a positive performance, with each company experiencing consistent growth. Investors seem optimistic about these stocks, as reflected in the steady increases in both opening and closing prices.