

Crypto Price Analysis



Overview & Goal

- **Overview**
 - Analyze 20 top crypto assets historical data from Kaggle
- **Goal**
 - Identify profitable trading strategies based on historical data of these assets

Dataset Utilized

- **Data**

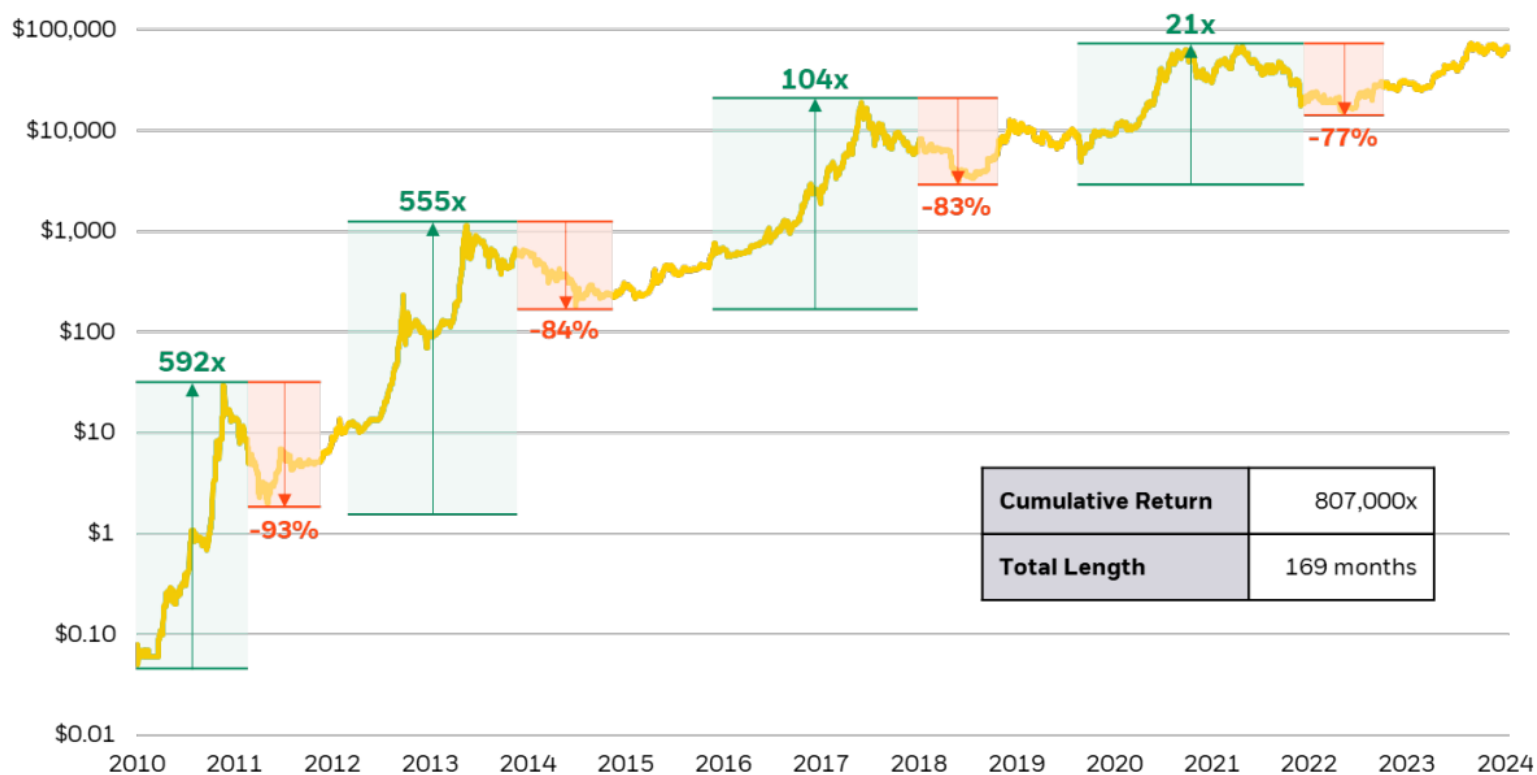
- Data used from Kaggle with daily open and close prices for each of the 20 assets from their first day of trading

- **Limitations**

- The data only contains open and close price for assets without considering other variables impacting price

Institutions Are Coming

Bitcoin's long-term performance



Past performance does not guarantee future results. Represents bitcoin's price performance from July 19, 2010 to July 31, 2024; the inception date reflects the launch of the first bitcoin exchange, Mt. Gox. Source: Bloomberg Bitcoin Spot Price, as of July 31, 2024.

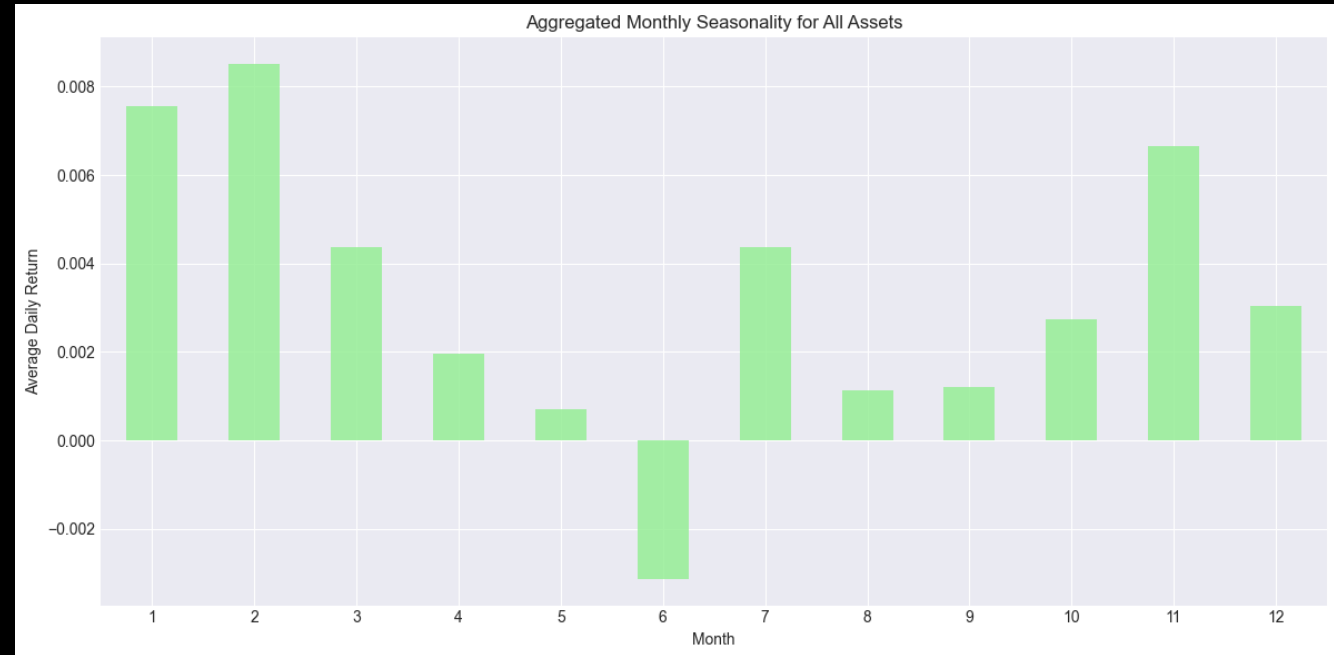
Asset Performance

- All 20 assets being analyzed have impressive returns since their first day of trading

Avg Yearly Returns %	
Asset	Avg Yearly Return
XRP	3419.420765
SOL	3026.208601
MATIC	2883.428062
ETH	1191.951278
DOGE	970.532953
AVAX	889.409815
BTC	683.254087
LTC	479.979653
NEAR	281.774634
BNB	233.584617
LINK	173.525554
ADA	156.004893
ALGO	98.486815
AAVE	88.849170
ATOM	80.191824
UNI	78.917586
LDO	72.165138
FIL	69.801737
SHIB	38.208066
COMP	24.551340

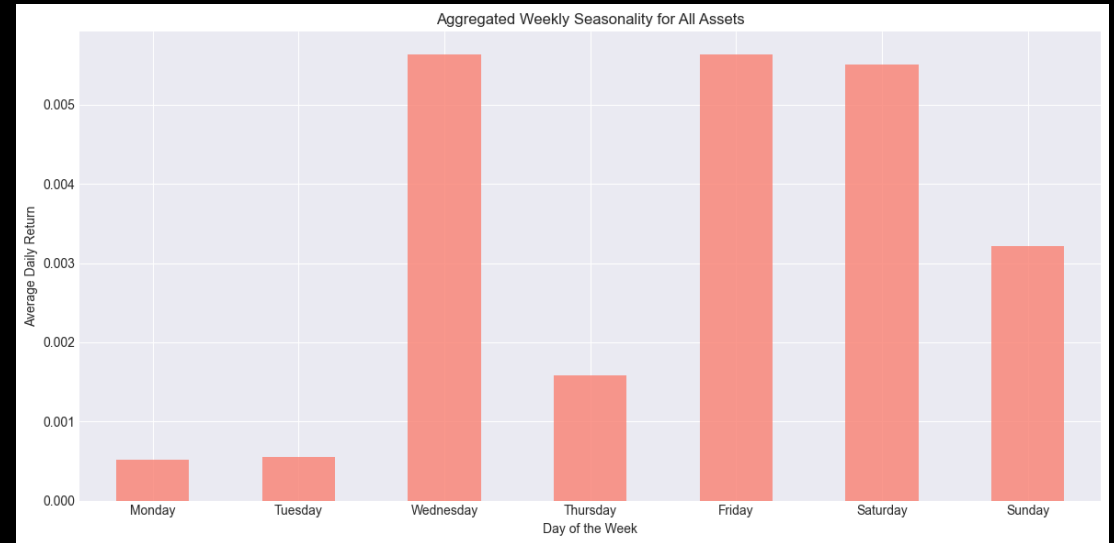
Monthly Performance

- **February** is the best performing month with an avg daily return of .8%
- June is the worst performing month with an avg daily return of -.2%



Daily Performance

- Friday & Saturday have avg returns greater than .5%
- Assets perform better on the weekend



Correlation Matrix

- **ETH and LINK** have a 0.61 correlation
- **BTC and ETH** have a very correlation of **0.56**



Modeling Predictions

We will be evaluating the highest market cap assets BTC, ETH, SOL, LINK

Model	Strategy	Outcome
ARIMA Time Series	Evaluate forecast predictions based on historical data	BTC recommended purchase
ARIMA Time Series w/ Moving Average	Utilize time series data with moving averages insights for trading	Positive returns less than buy and hold strategy
Prophet Model	Utilize RSI for trade signals	Returns above buy and hold market strategy for BTCH & ETH

Recommendations & Next Steps

- **Recommendations**

- Utilize the prophet model with RSI parameters for BTC & ETH to generate outsized returns vs the market

- **Next Steps**

- Include additional data points to make model more robust
- Back test performance and optimize parameters on regular cadence
- Evaluate additional assets for trading