**Research question**: Price movement prediction of Bitcoin and other cryptocurrencies using sentiment and machine learning.

Forecasting price movement of Bitcoin and other cryptocurrencies using sentiment and algorithms.

How Investors’ fear and uncertainty can be used to predict the future short-term movement of cryptocurrencies prices? Using sentiment and machine learning

**Themes**: Cryptocurrencies, Behavioural Finance, Sentiment Analysis, Machine Learning, Trading

**Methodology**: Quantitative Analysis, OLS/GLS regressions, bivariate autoregressions, charts, predictive algorithm

**Data**:

* Play to earn CryptoPick data using prediction of a crowd and expert of the game on their opinion on whether the BTC is going up or down the next day to estimate the future movement of the price of Bitcoin. Data only on 8 months.
* Crypto Fear and Greed API to see the correlation on the Action Price and the sentiment of the crowd
* Data from CoinMarketCap or TradingView or YahooFinance, CoinAPI, VIX and other sentiment Index on equity market

**Contribution**:

* None of the Financial articles use the data of CryptoPick
* None of the Financial articles use the API of Crypto Fear and Greed, Google Trend and macroeconomics factors to do a regression and see the effect
* None use all crypto assets, only 10, maximum 15 crypto where used and not all -> crypto total index on tradingview
* Try to find a correlation between the Price Action and the sentiment of the crowd/expert, announcement, transaction movements, lockdown, fear
* See the impact of sentiment index on equity market (VIX, US Equity Uncertainty index, American Association Individual Investors) regarding the crypto market and see the possibility of hedging, like gold
* Effect pre-covid, post-covid and see the difference + overall analysis

**Literature Reviews**:

* **Investor Sentiment and the Cross-Section of Stock Returns***, Journal of Finance,* **1,** when sentiment is low, the subsequent returns on stocks at both extreme are especially high relative to their unconditional average, while stocks in the middle deciles are less affected by sentiment
* **Giving Content to Investor Sentiment: The Role of Media in the Stock Market,** *Journal of Finance,* **1,** stocks of low capitalization, younger, unprofitable, high-volatility, non–dividend paying, growth companies or stocks of firms in financial distress are likely to be disproportionately sensitive to broad waves of investor sentiment
* **Is Bitcoin Really Untethered?** *Journal of Finance***, 1,** BTC Price is manipulated by one address
* **Investor Sentiment in the Stock Market***, Journal of Economic Perspectives***, 1**
* **Analysis of Bitcoin prices using market and sentiment variables,** *World Economy***, 2,** The S&P 500 index has a positive effect on the fundamental value of Bitcoin prices and the gold spot price and the fear index have a negative effect
* **The predictive power of public Twitter sentiment for forecasting cryptocurrency prices***, Journal of Inter. Financial Markets, Institutions & Money***, 3,** Twitter sentiment can be used to predict the price returns of Bitcoin, Bitcoin Cash and Litecoin
* **On cryptocurrencies as an independent asset class: Long-horizon and COVID-19 pandemic era decoupling from global sentiments,** *Finance Research letters***, 3,** Crypto as decoupled asset class
* **Does Sentiment Impact Cryptocurrency?** *Journal of Behavioural Finance***, NR,** When the investor sentiment is exceptionally pessimistic or optimistic, there is a possibility of extreme movement in the prices