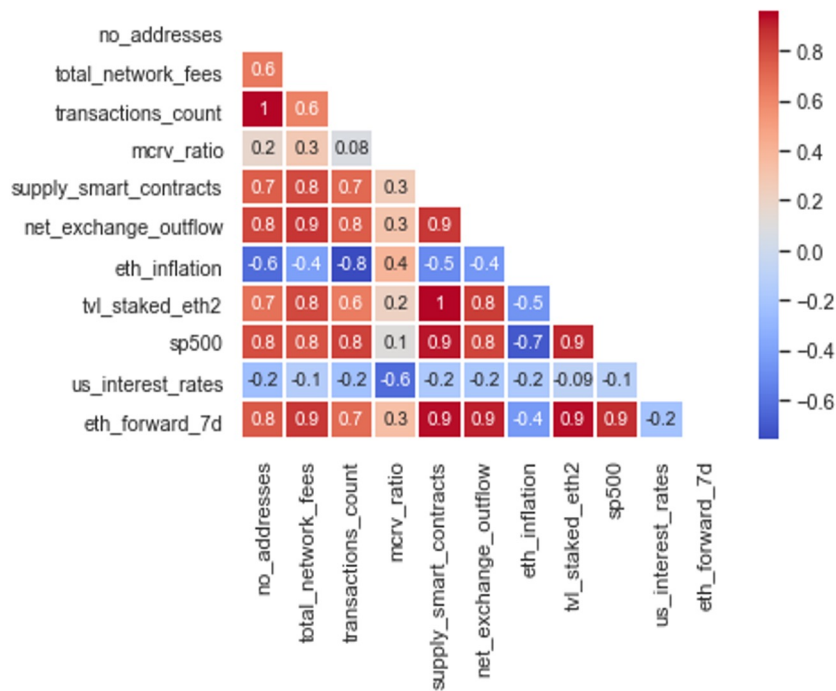


# Macro Factor Models

## Example on Digital Assets

# Fundamental Factor Model

## ETH Fundamental Features (Correlations)



## ETH Factors

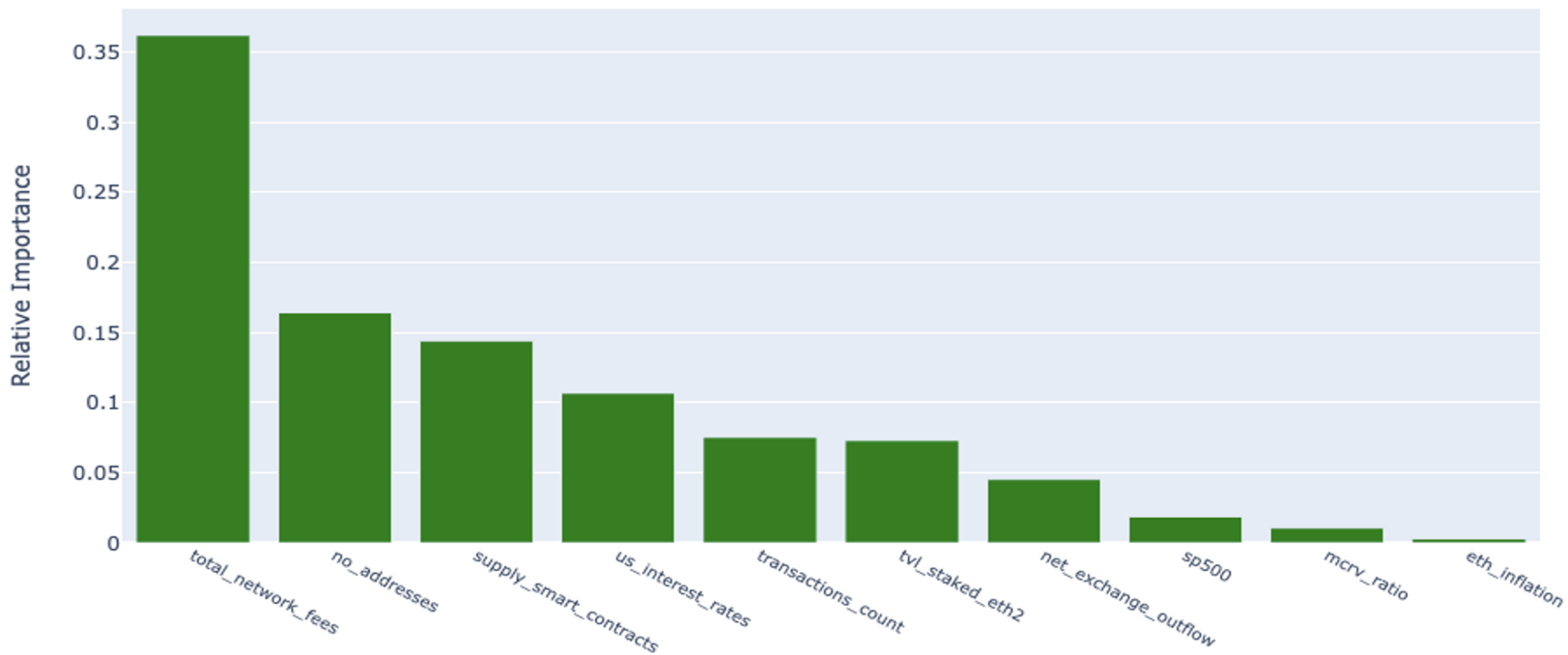
## Description of Factors

- **Number of active addresses** Historical total number of daily active addresses
- **Total network fees** Historical total ETH network fees
- **Transactions count** Total number of transactions on mainnet
- **MCRV ratio** Market value to realized market cap ratio
- **Supply in smart contracts** Total supply of ETH in smart contracts
- **Net exchange outflow** Net exchange outflows, outflows is positive sign
- **ETH inflation** Historical annualized ETH inflation
- **TVL staked ETH2** Total values staked for ETH2
- **SP500** SP500 index as proxy for traditional risk premia
- **US interest rate** 2 year forward fed funds rate for as a proxy FED

# Fundamental Factors Relevance

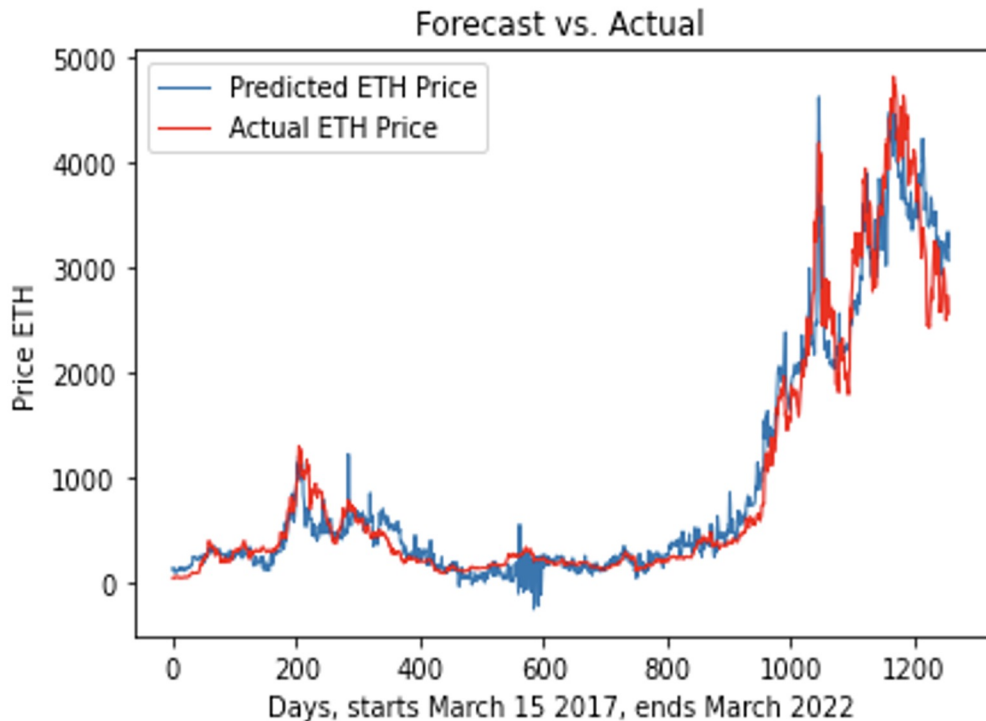
## Significance of fundamental factors

Feature Importance (RF)



# Forecast

Model forecasts ETH price seven days ahead based on current fundamental factors



## Assumptions:

- Assume expected return is driven by fundamental factors (tradfi + crypto)
- Validate & evaluate assumptions (train & test)

## Drawbacks:

- Requires inputs on fundamentals
- Historical relationships may not hold in the future
- It will not capture structural breaks (e.g MERGE)