

Fund Price Prediction

Jhonathan David Shaikh, MBA
Data Scientist, Flat Iron School NYC Campus
August 20, 2023

An MVP Model Time Series for Testing Purposes
~Not Investment Advice~



Start

Problem

Business and Problem
Understanding

Mid

Solve

Recommendations
-1 Dataset Analyzed
- Models & Methods

Finish

Results

Business

Steps to get you Results

1. Understanding Your Needs & Dataset

Problem /Solution

2. Technical Approach

Model Forecasting

3. Assessing Data Set

Time Series Components
Decomposition

4. Models & Methods

ARIMA & SARIMAX

5. Conclusion

Plan for the Future and
Management Plan

01

Understanding Your Needs, and Dataset

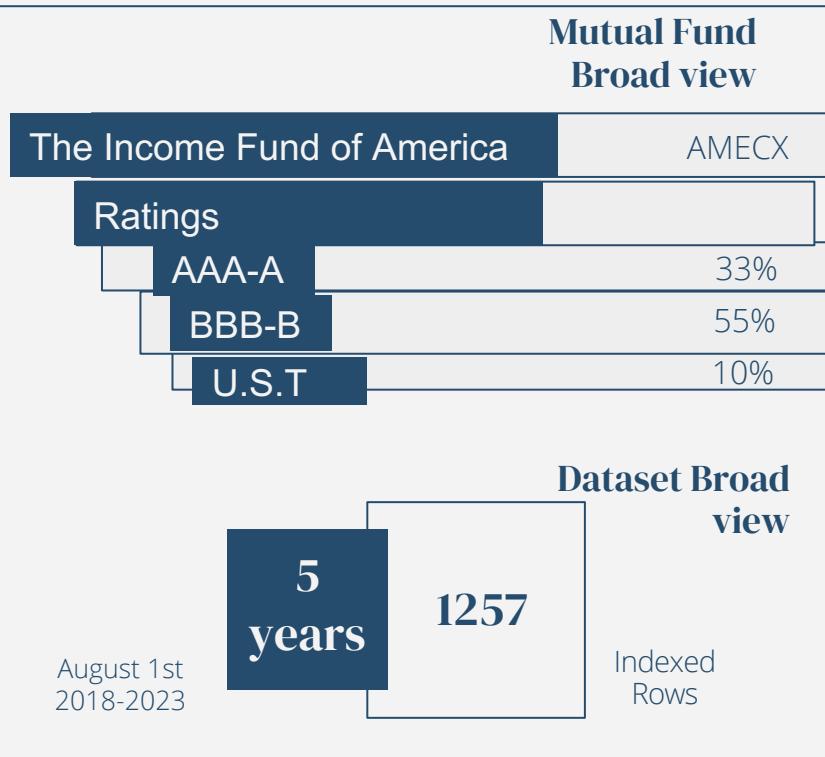
Problem

1. Predicting Fund Prices i.e.
AMECX Fund Projection
2. Finding the right Partner

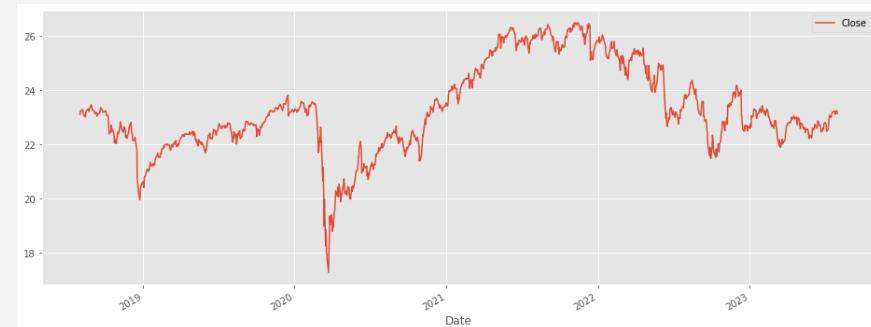
Solution

1. Technical – MVP Model Time Series Forecasting 1 year of Fund price
2. Discovery of what is needed to standarize future Modeling

Broad Understanding



5 year Price History & Stats



\$23. Avg. Price



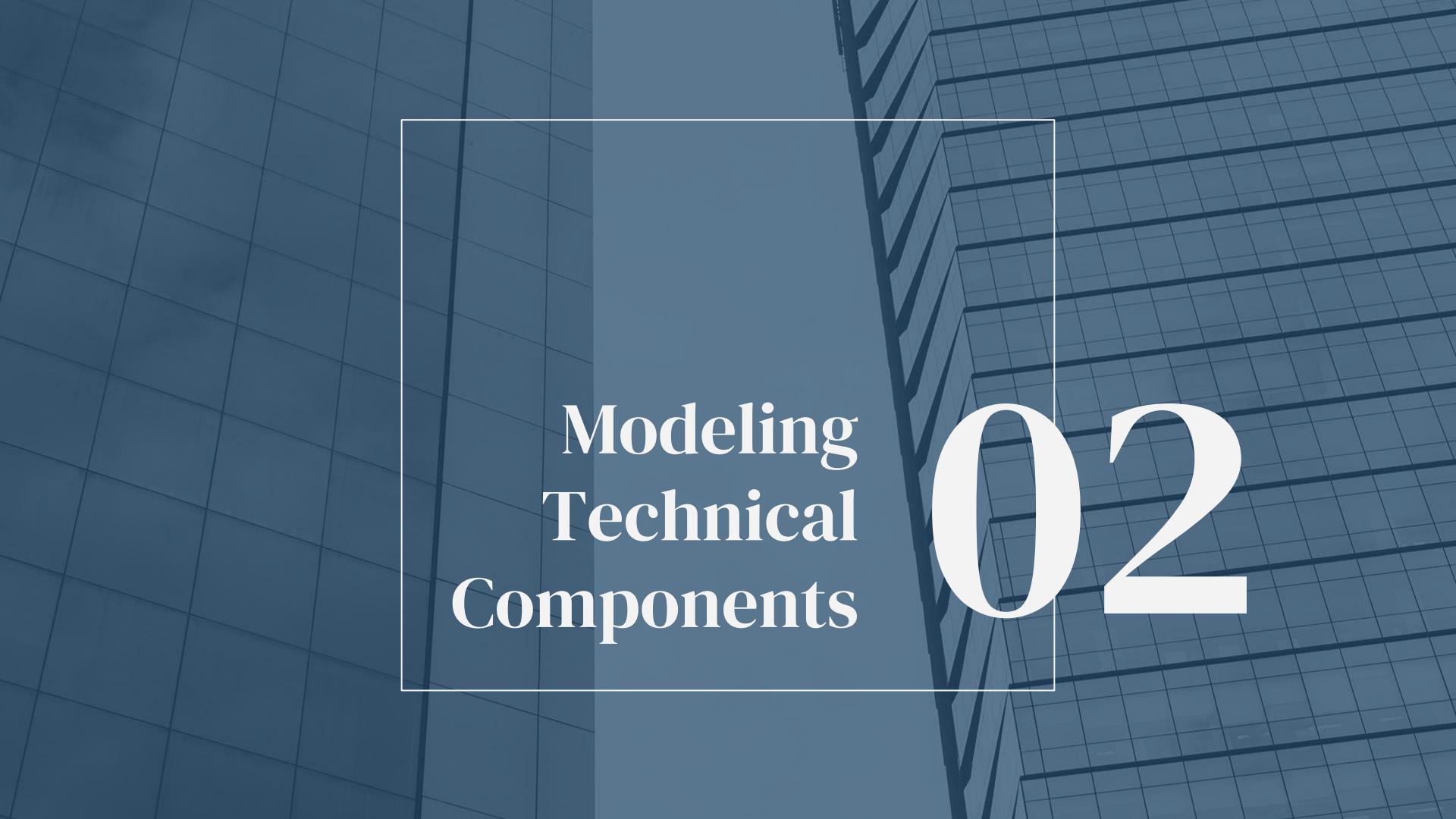
Std.Deviation \$1.62

\$26.50 Max



\$17.29 Min





Modeling Technical Components

02

Components of the Technical Solution

2) Dataset Preparation

EDL, Data Preparation (Indexing,
TS transformation)
Decomposition & Stationarity
Assesing Trends



1) The Dataset

AMECX

4) Modeling Forecast

-Steps
-Model Fit
-AIC
-Root Mean Square Error
-Forecasting



3) Set up for Forecasting

-Asseses -->Stationarity &
Decomposition→
Differencing
-Auto Correlation (ACF)
-Partial Autocorrelation
(PACF)

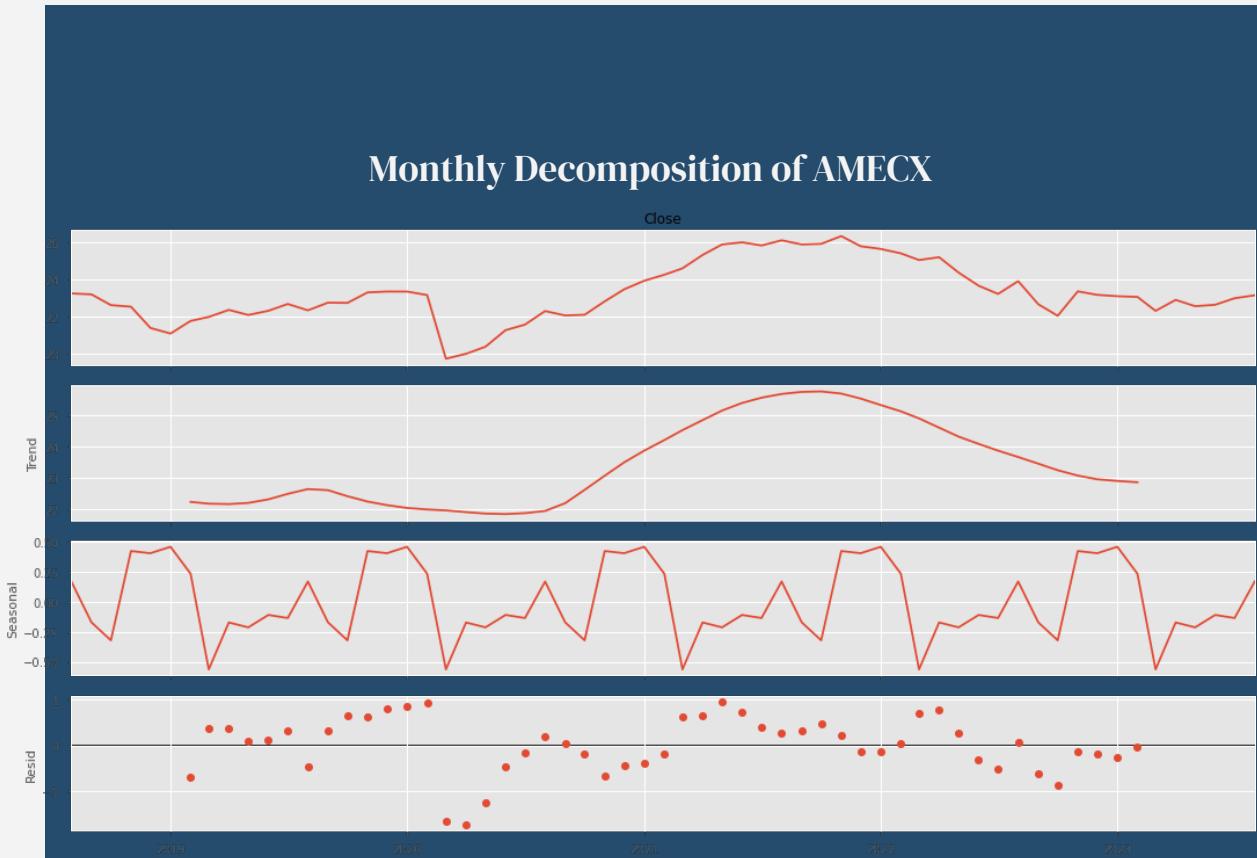




03 Assessing Dataset

Assessing Dataset

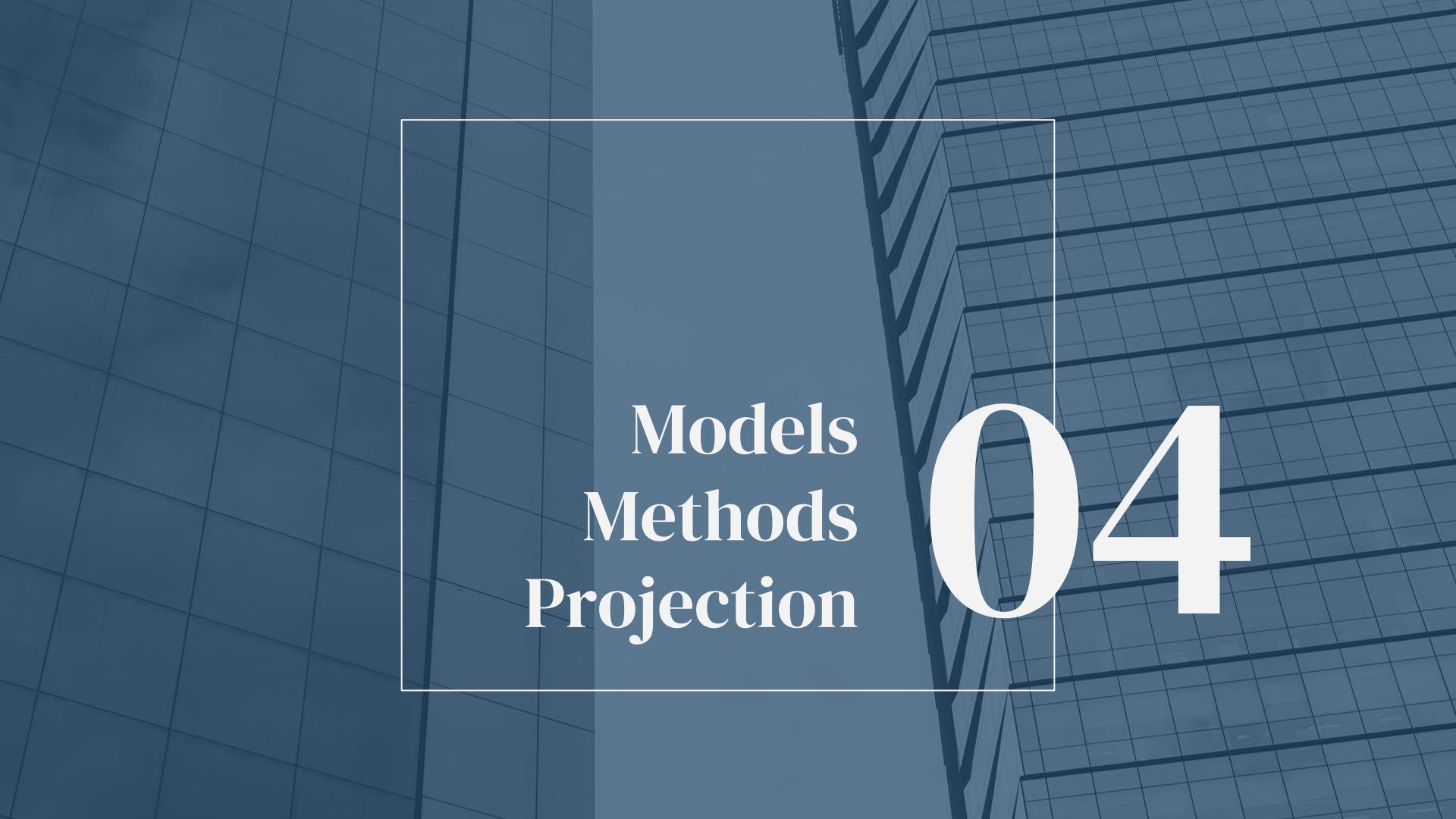
- Data
- Trend
- Seasonality
- Residual



- Applying Components for Predictions



1. Assessing Trends
2. Testing Stationarity
3. Difference Data to make it more Stationary
4. Understand Auto Correlations and Partial Auto Correlations
5. Run Models, test best with AIC, and RMSE > conduct Predictions



The background features a subtle, light-colored grid pattern on a dark blue background. Two white rectangular frames are positioned vertically on the left and right sides of the central text area.

Models Methods Projection

04

Models

MODEL NAME	AIC	RMSE
AR/MA_1	101.09	1.23
AR/MA_2	102.91	1.27
ARIMA	102.44	1.46
SARIMAX	99.855	1.04

SARIMAX-
1 year
projection
on price
range
US\$21-
\$22.25

Fund AMECX FORECAST





Conclusion:

05

Time Series Reproducibility with additional success components



Capturing the right timing

Time series adapted to the right fit of time.

Conducting testing

Testing starts with AMECX.

Choosing Portfolio Addressing multiple funds

Over 8,000 funds available.



Thanks

Does anyone have any questions?

addyouremail@freepik.com
+91 620 421 838
yourcompany.com



Fabolous Team ! Do Business with us!



Our Pricing

\$100K

120 Hours

- Assessing Funds
- Finding Data Sets
- MVP Models
- Research
- Model Validation
- Model Documenting

Your benefit

\$20 MM * 0.04
=\$800,000

