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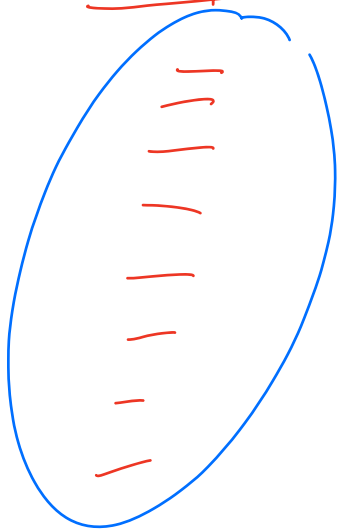


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Unemployment Rate : USA.

une data diffent.

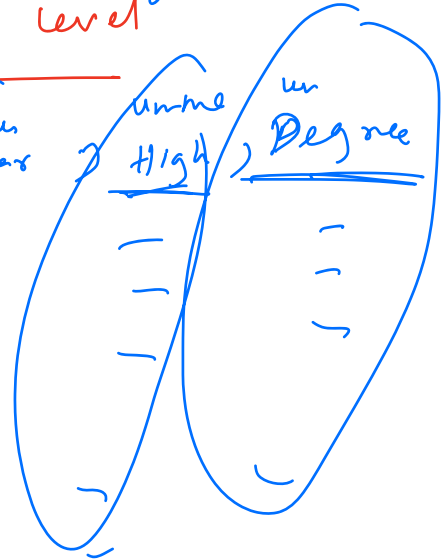
total. Total USA.
Unemployment



Education level



exogenous variab



①: ~~ARIMAX~~ / VAR Regression

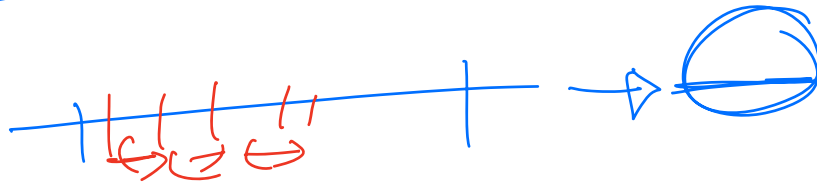
$$Y \sim x_1, x_2, x_3$$

total. us.
unemployment

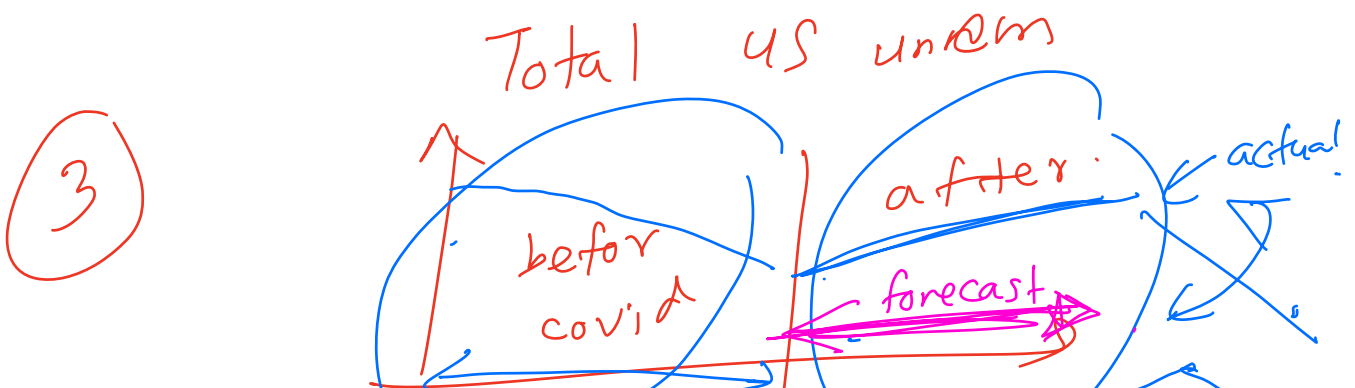
x_1 GDP, x_2 Inflation,
personal Income

ARIMAX model.

ARIMA → forecast
Total Unem 1 Series



ARIMAX : Regression
↓
Residuals
Corrⁿ ↗
ARIMA
ARIMAX



ARIMA - Unem 2019 Dec

Total unemp.

covid cases.

After

ARIMAX

2019-Dec - 2022-Jul

response

Total unem

2019 Dec

exogen
x

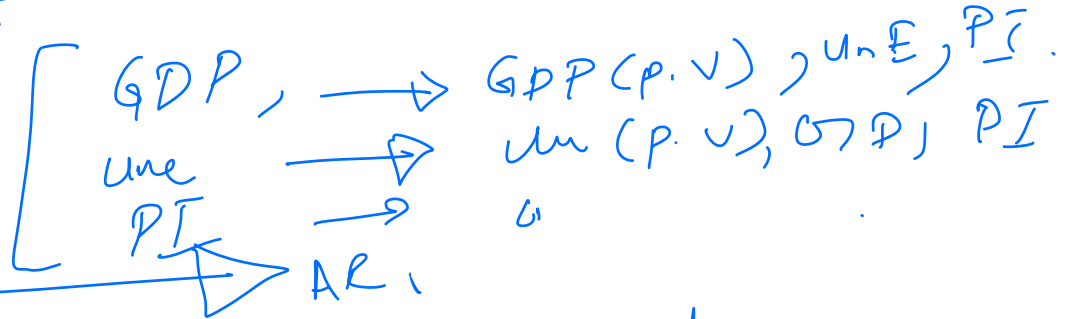
covid
cases

covid.
death

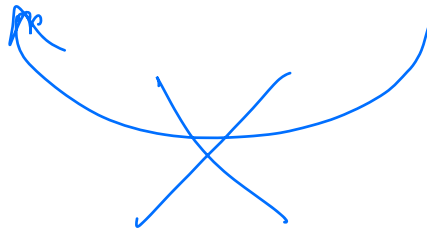
VAR :

GDP, Unem, PI,

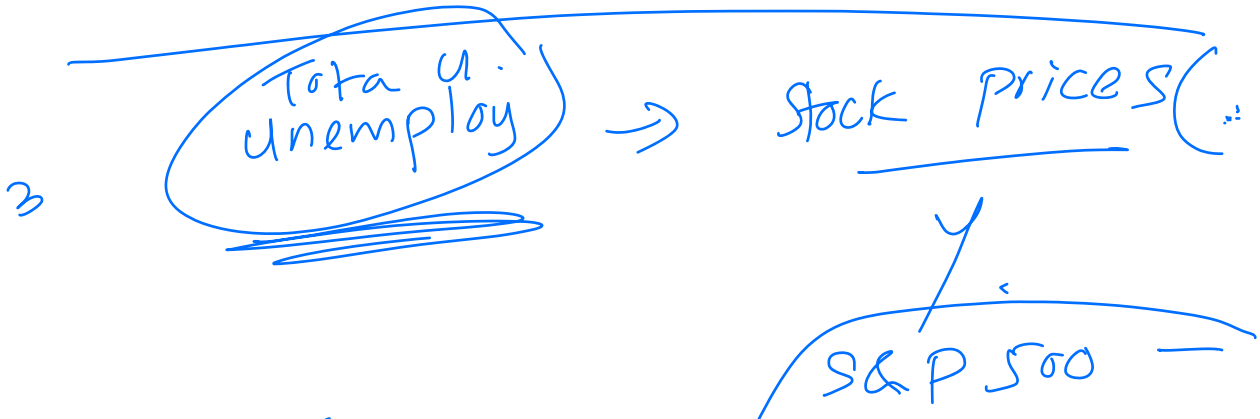
multivariate
ratio
pre.



Unem = covid case



macro Economic \rightarrow Econ



Total
stock
in the
market

Dow Jones -
NAS - - - -

Tech Comp

→ unemp rate Tech Comp

AB - - -

→ stock price