

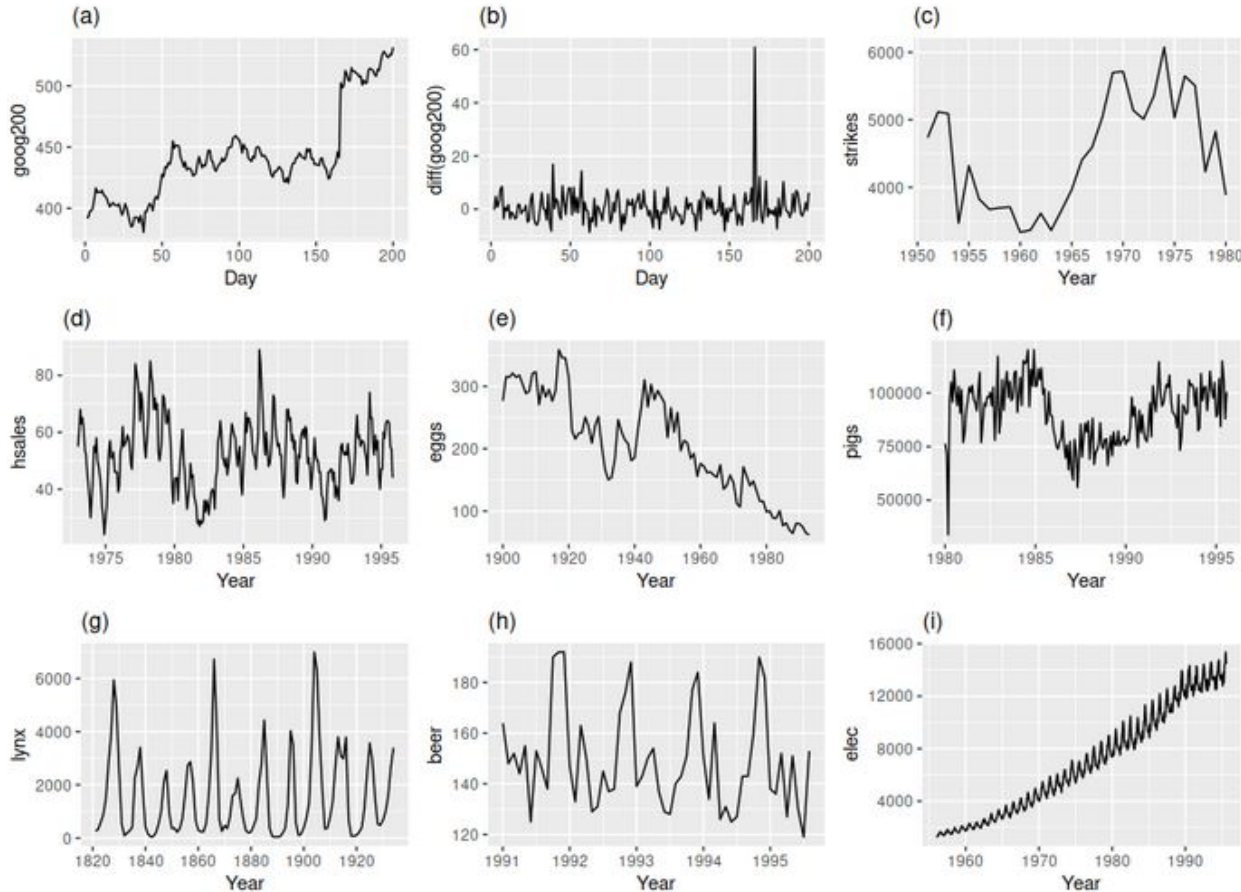
Test for Stationarity

How to check Stationarity?

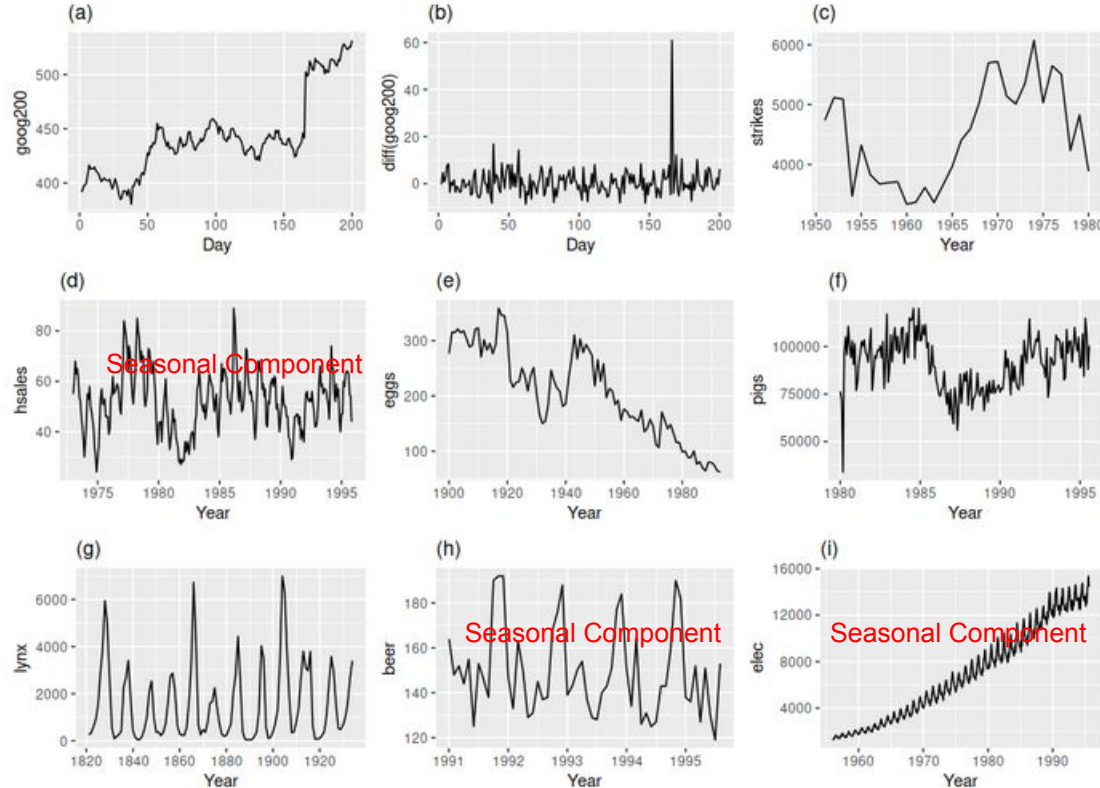
- Visual Test
 - Trend
 - Seasonality



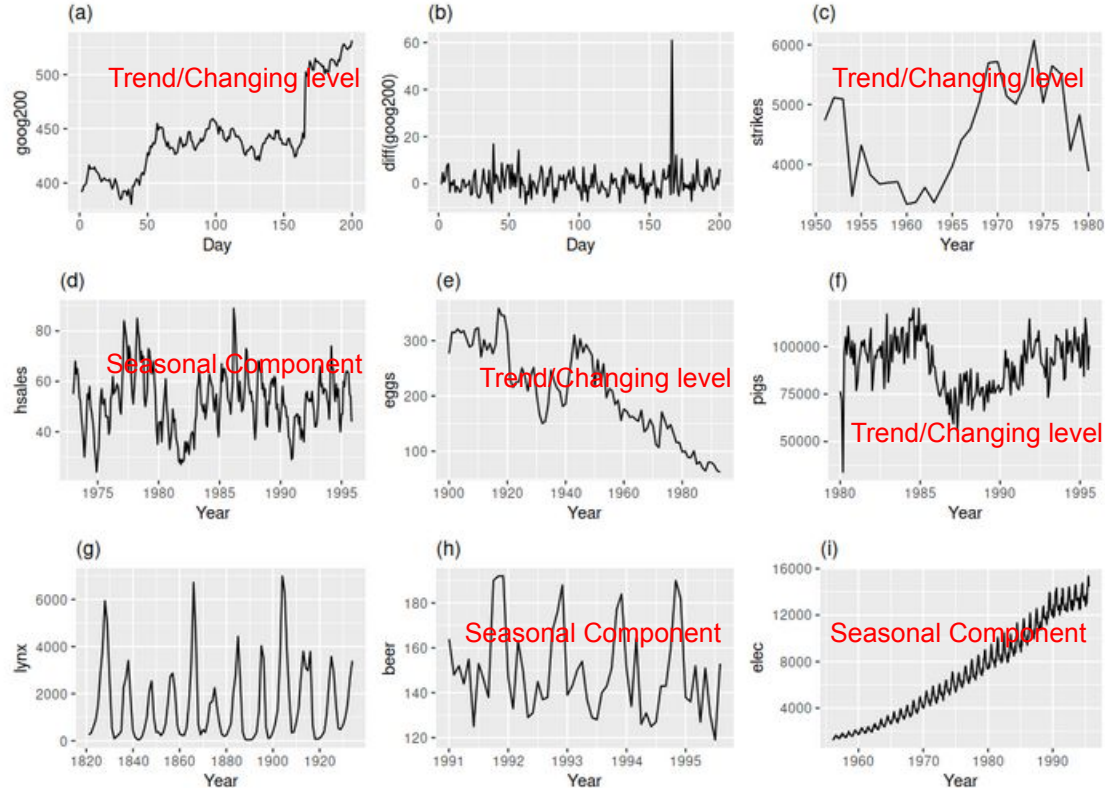
How to check Stationarity?



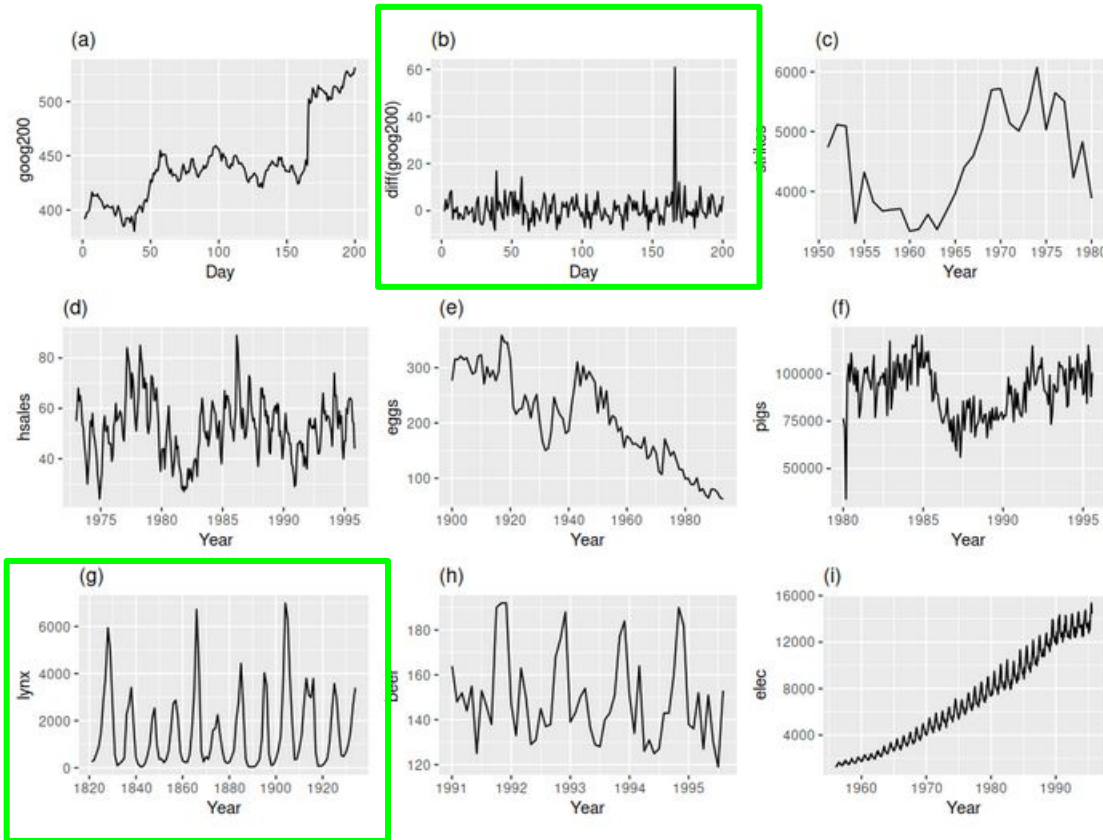
How to check Stationarity?



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How to check Stationarity?



How to check Stationarity?

- Visual Test
 - Trend
 - Seasonality
- Statistical Test
 - Augmented Dickey Fuller (ADF) Test
 - Kwiatkowski–Phillips–Schmidt–Shin (KPSS) Test

Augmented Dickey Fuller Test

- Statistical Test to check stationarity
 - Null Hypothesis - Series is not stationary
 - Alternate Hypothesis - Series is stationary

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Results of Dickey-Fuller Test:

Test Statistic	1.183950
p-value	0.995873
#Lags Used	19.000000
Number of Observations Used	514.000000
Critical Value (1%)	-3.443136
Critical Value (5%)	-2.867179
Critical Value (10%)	-2.569774

dtype: float64

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Test - Statistic < Critical

KPSS Test

- Statistical Test to check stationarity
 - Null Hypothesis - Series is trend stationary
 - Alternate Hypothesis - Series is not stationary

KPSS Test

- Statistical Test to check stationarity
 - Null Hypothesis - Series is trend stationary
 - Alternate Hypothesis - Series is not stationary

```
Results of KPSS Test:  
Test Statistic      2.84663  
p-value             0.01000  
Lags Used           19.00000  
Critical Value (10%) 0.34700  
Critical Value (5%)  0.46300  
Critical Value (2.5%) 0.57400  
Critical Value (1%)  0.73900  
dtype: float64
```

KPSS Test

- Statistical Test to check stationarity
 - Null Hypothesis - Series is trend stationary
 - Alternate Hypothesis - Series is not stationary

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Lags Used           19.00000  
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Test - Statistic < Critical

Notebook

Thank You