

```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

```
pip install prophet
```

```
Requirement already satisfied: prophet in /usr/local/lib/python3.10/dist-packages (1.1.5)
Requirement already satisfied: cmdstanpy>=1.0.4 in /usr/local/lib/python3.10/dist-packages (from prophet) (1.2.4)
Requirement already satisfied: numpy>=1.15.4 in /usr/local/lib/python3.10/dist-packages (from prophet) (1.25.2)
Requirement already satisfied: matplotlib>=2.0.0 in /usr/local/lib/python3.10/dist-packages (from prophet) (3.7.1)
Requirement already satisfied: pandas>=1.0.4 in /usr/local/lib/python3.10/dist-packages (from prophet) (2.0.3)
Requirement already satisfied: holidays>=0.25 in /usr/local/lib/python3.10/dist-packages (from prophet) (0.53)
Requirement already satisfied: tqdm>=4.36.1 in /usr/local/lib/python3.10/dist-packages (from prophet) (4.66.4)
Requirement already satisfied: importlib-resources in /usr/local/lib/python3.10/dist-packages (from prophet) (6.4.0)
Requirement already satisfied: stanio<2.0.0,>=0.4.0 in /usr/local/lib/python3.10/dist-packages (from cmdstanpy>=1.0.4->prophet) (0.5.1)
Requirement already satisfied: python-dateutil in /usr/local/lib/python3.10/dist-packages (from holidays>=0.25->prophet) (2.8.2)
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (1.2.1)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (4.53.1)
Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (1.4.5)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (24.1)
Requirement already satisfied: pillow>=6.2.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (9.4.0)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=2.0.0->prophet) (3.1.2)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=1.0.4->prophet) (2023.4)
Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=1.0.4->prophet) (2024.1)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-packages (from python-dateutil->holidays>=0.25->prophet) (1.16.0)
```

```
# Import necessary libraries
import pandas as pd
```

```
# File path
file_path = '/content/drive/My Drive/global_unemployment_data.csv'
```

```
# Read the CSV file
df = pd.read_csv(file_path)
```

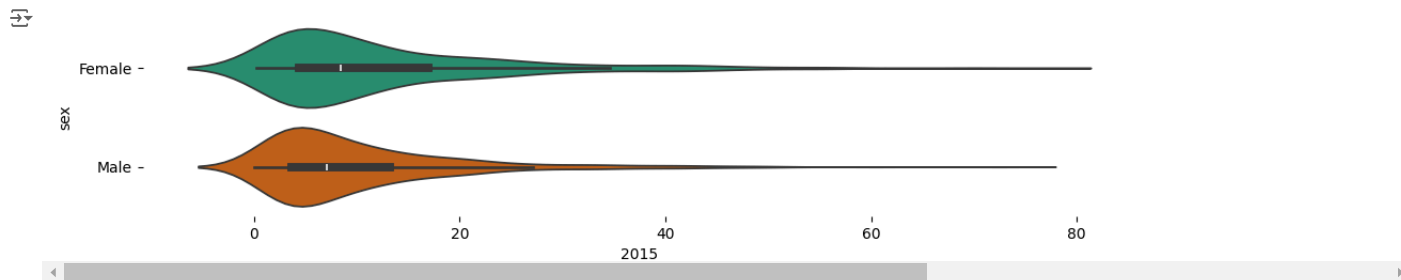
```
# Display the first few rows of the dataframe
df.head()
```

	country_name	indicator_name	sex	age_group	age_categories	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
0	Afghanistan	Unemployment rate by sex and age	Female	15-24	Youth	13.340	15.974	18.570	21.137	20.649	20.154	21.228	21.640	30.561	32.200	33.332
1	Afghanistan	Unemployment rate by sex and age	Female	25+	Adults	8.576	9.014	9.463	9.920	11.223	12.587	14.079	14.415	23.818	26.192	28.298
2	Afghanistan	Unemployment rate by sex and age	Female	Under 15	Children	10.306	11.552	12.789	14.017	14.706	15.418	16.783	17.134	26.746	29.193	30.956
3	Afghanistan	Unemployment rate by sex and age	Male	15-24	Youth	9.206	11.502	13.772	16.027	15.199	14.361	14.452	15.099	16.655	18.512	19.770
4	Afghanistan	Unemployment rate by sex and age	Male	25+	Adults	6.463	6.879	7.301	7.728	7.833	7.961	8.732	9.199	11.357	12.327	13.087

## sex vs 2015

```
# @title sex vs 2015
```

```
from matplotlib import pyplot as plt
import seaborn as sns
figsize = (12, 1.2 * len(df['sex'].unique()))
plt.figure(figsize=figsize)
sns.violinplot(df, x='2015', y='sex', inner='box', palette='Dark2')
sns.despine(top=True, right=True, bottom=True, left=True)
```



```
from google.colab import sheets
sheet = sheets.InteractiveSheet(df=df)
```

<https://docs.google.com/spreadsheets/d/1wCdJmTLT4apMmWlyKE-Hyuuud0K0qMFax936Wm-fTk#gid=0>

InteractiveSheet_2024-07-26_15_06_44													
File Edit View Insert Format Data Tools Extensions Help													
100% 123 Default... 10 B I A													
country_name													
country_name	indicator_name	sex	age_group	age_categories	2014	2015	2016	2017	2018	2019	2020	2021	2022
Afghanistan	Unemployment r	Female	15-24	Youth	13.34	15.974	18.57	21.137	20.649	20.154	21.228		
Afghanistan	Unemployment r	Female	25+	Adults	8.576	9.014	9.463	9.92	11.223	12.587	14.079		
Afghanistan	Unemployment r	Female	Under 15	Children	10.306	11.552	12.789	14.017	14.706	15.418	16.783		
Afghanistan	Unemployment r	Male	15-24	Youth	9.206	11.502	13.772	16.027	15.199	14.361	14.452		
Afghanistan	Unemployment r	Male	25+	Adults	6.463	6.879	7.301	7.728	7.833	7.961	8.732		
Afghanistan	Unemployment r	Male	Under 15	Children	7.34	8.355	9.362	10.36	10.137	9.93	10.458		
Albania	Unemployment r	Female	15-24	Youth	32.59	40.274	34.102	27.429	25.765	26.005	29.766		
Albania	Unemployment r	Female	25+	Adults	13.6	14.499	12.142	10.875	10.312	9.662	10.743		
Albania	Unemployment r	Female	Under 15	Children	15.476	17.115	14.477	12.511	11.876	11.324	12.536		
Albania	Unemployment r	Male	15-24	Youth	43.556	39.644	37.63	34.023	29.906	27.953	31.426		
Albania	Unemployment r	Male	25+	Adults	16.316	13.874	13.311	11.972	10.201	9.43	10.826		
Albania	Unemployment r	Male	Under 15	Children	19.853	17.245	16.148	14.452	12.625	11.584	13.065		
Algeria	Unemployment r	Female	15-24	Youth	39.169	44.598	43.664	45.734	46.235	46.65	52.886		
Algeria	Unemployment r	Female	25+	Adults	11.913	12.301	14.918	17.576	17.879	18.138	20.163		
Algeria	Unemployment r	Female	Under 15	Children	15.687	16.605	18.309	20.785	21.02	21.23	23.536		
Algeria	Unemployment r	Male	15-24	Youth	22.742	27.05	22.346	26.877	27.36	27.767	31.682		
Algeria	Unemployment r	Male	25+	Adults	6.491	7.15	6.042	7.369	7.56	7.726	9.19		

### age\_categories vs 2014

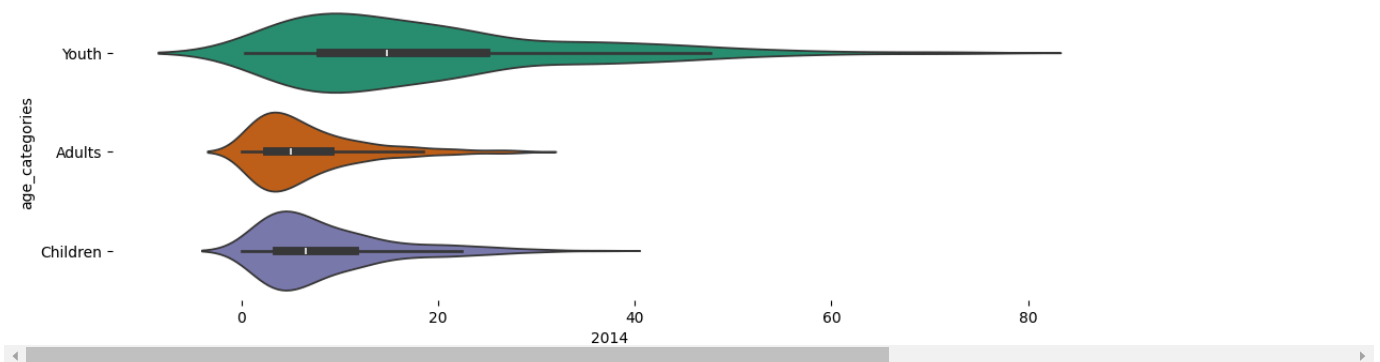
# @title age\_categories vs 2014

```
from matplotlib import pyplot as plt
import seaborn as sns
figsize = (12, 1.2 * len(df['age_categories'].unique()))
plt.figure(figsize=figsize)
sns.violinplot(df, x='2014', y='age_categories', inner='box', palette='Dark2')
sns.despine(top=True, right=True, bottom=True, left=True)
```

<ipython-input-12-58ebb1c179cc>:7: FutureWarning:

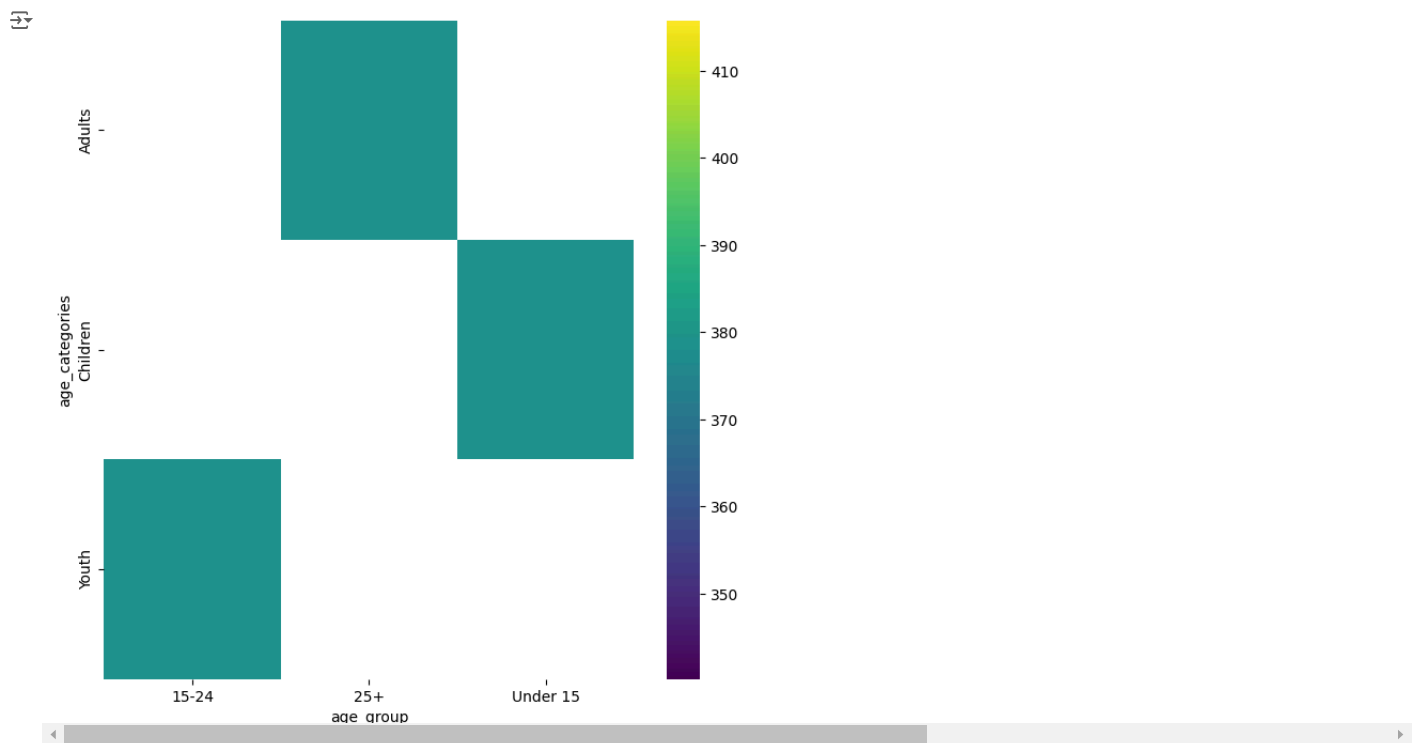
Passing `palette` without assigning `hue` is deprecated and will be removed in v0.14.0. Assign the `y` variable to `hue` and set `legend=False` for the same effect.

```
sns.violinplot(df, x='2014', y='age_categories', inner='box', palette='Dark2')
```



### > age\_group vs age\_categories

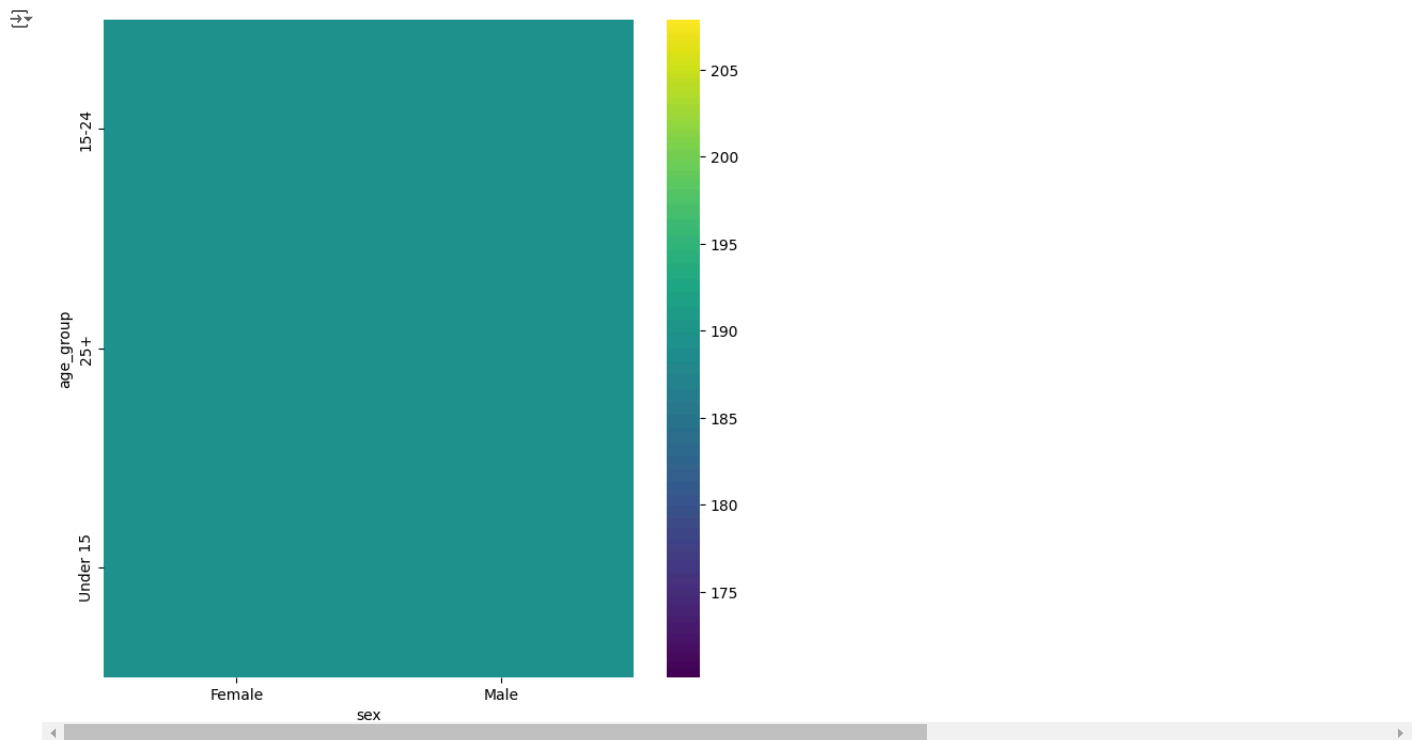
[Show code](#)



### sex vs age\_group

```
# @title sex vs age_group

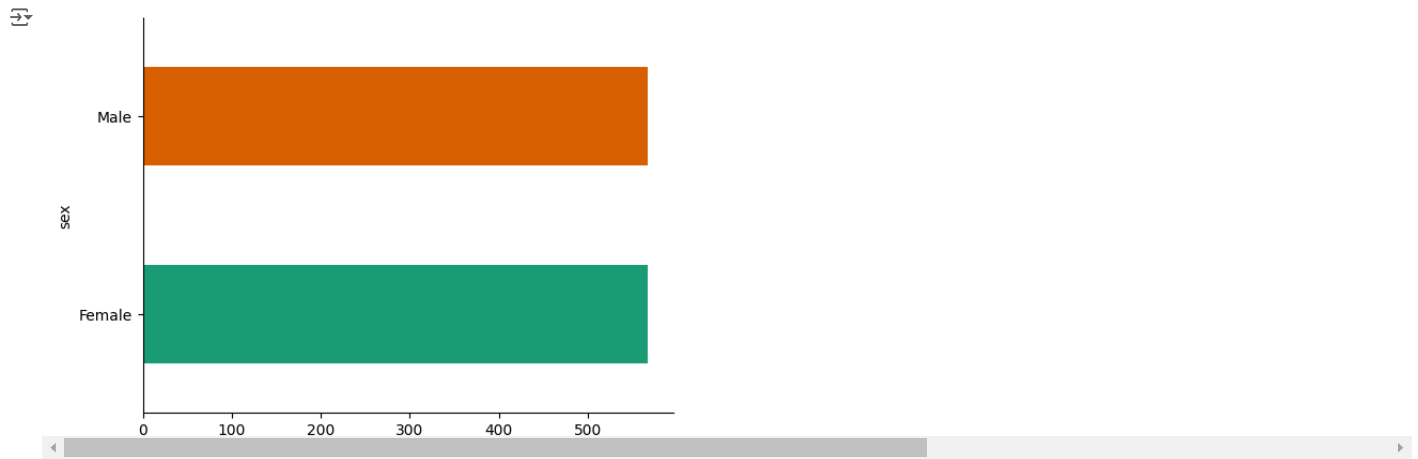
from matplotlib import pyplot as plt
import seaborn as sns
import pandas as pd
plt.subplots(figsize=(8, 8))
df_2dhist = pd.DataFrame({
    x_label: grp['age_group'].value_counts()
    for x_label, grp in df.groupby('sex')
})
sns.heatmap(df_2dhist, cmap='viridis')
plt.xlabel('sex')
_ = plt.ylabel('age_group')
```



### sex

```
# @title sex

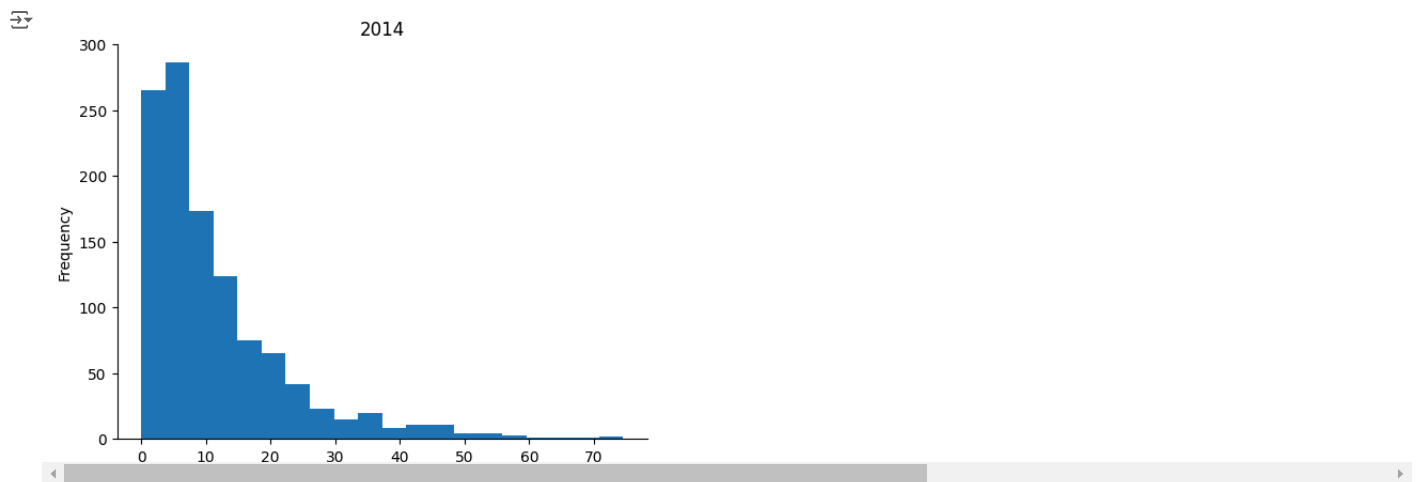
from matplotlib import pyplot as plt
import seaborn as sns
df.groupby('sex').size().plot(kind='barh', color=sns.palettes.mpl_palette('Dark2'))
plt.gca().spines[['top', 'right']].set_visible(False)
```



## ▼ 2014

# @title 2014

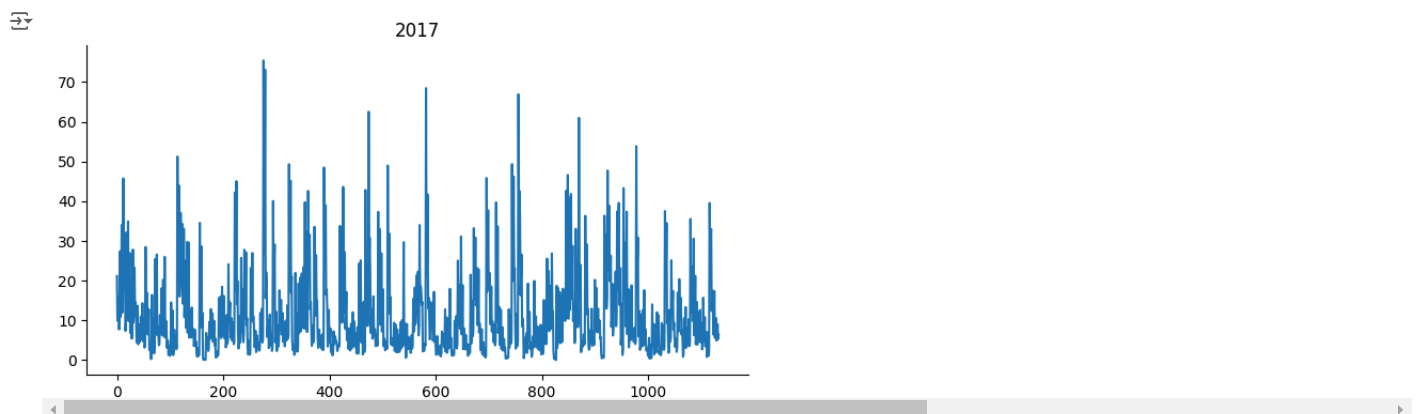
```
from matplotlib import pyplot as plt
df['2014'].plot(kind='hist', bins=20, title='2014')
plt.gca().spines[['top', 'right']].set_visible(False)
```



## ▼ 2017

# @title 2017

```
from matplotlib import pyplot as plt
df['2017'].plot(kind='line', figsize=(8, 4), title='2017')
plt.gca().spines[['top', 'right']].set_visible(False)
```



```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

# Step 1: Load the dataset
# Assuming the dataset is in a CSV file named 'dataset.csv'

# Step 2: Inspect the data
print(df.head())
print(df.info())

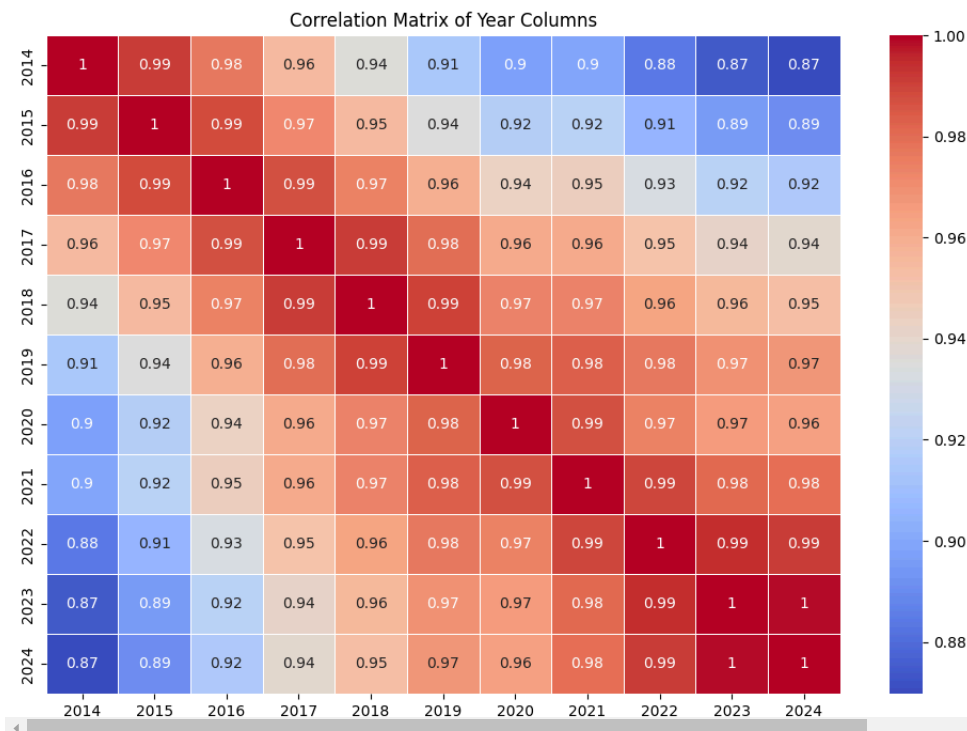
# Step 3: Calculate the correlation matrix for the year columns
year_columns = ['2014', '2015', '2016', '2017', '2018', '2019', '2020', '2021', '2022', '2023', '2024']
correlation_matrix = df[year_columns].corr()

# Step 4: Visualize the correlations using a heatmap
plt.figure(figsize=(12, 8))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm', linewidths=0.5)
plt.title('Correlation Matrix of Year Columns')
plt.show()
```

```
country_name indicator_name sex age_group \
0 Afghanistan Unemployment rate by sex and age Female 15-24
1 Afghanistan Unemployment rate by sex and age Female 25+
2 Afghanistan Unemployment rate by sex and age Female Under 15
3 Afghanistan Unemployment rate by sex and age Male 15-24
4 Afghanistan Unemployment rate by sex and age Male 25+

age_categories 2014 2015 2016 2017 2018 2019 2020 \
0 Youth 13.340 15.974 18.570 21.137 20.649 20.154 21.228
1 Adults 8.576 9.014 9.463 9.920 11.223 12.587 14.079
2 Children 10.306 11.552 12.789 14.017 14.706 15.418 16.783
3 Youth 9.206 11.502 13.772 16.027 15.199 14.361 14.452
4 Adults 6.463 6.879 7.301 7.728 7.833 7.961 8.732

2021 2022 2023 2024
0 21.640 30.561 32.200 33.332
1 14.415 23.818 26.192 28.298
2 17.134 26.746 29.193 30.956
3 15.099 16.655 18.512 19.770
4 9.199 11.357 12.327 13.087
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1134 entries, 0 to 1133
Data columns (total 16 columns):
# Column Non-Null Count Dtype
---
0 country_name 1134 non-null object
1 indicator_name 1134 non-null object
2 sex 1134 non-null object
3 age_group 1134 non-null object
4 age_categories 1134 non-null object
5 2014 1134 non-null float64
6 2015 1134 non-null float64
7 2016 1134 non-null float64
8 2017 1134 non-null float64
9 2018 1134 non-null float64
10 2019 1134 non-null float64
11 2020 1134 non-null float64
12 2021 1134 non-null float64
13 2022 1128 non-null float64
14 2023 1122 non-null float64
15 2024 1122 non-null float64
dtypes: float64(11), object(5)
memory usage: 141.9+ KB
None
```



```
desc_stats = df.describe()
print(desc_stats)
```

```

count 1134.000000 1134.000000 1134.000000 1134.000000 1134.000000 \
mean 11.387800 11.272444 11.122963 10.863516 10.516499
std 11.119002 10.915942 10.742947 10.640980 10.527773
min 0.027000 0.034000 0.038000 0.035000 0.044000
25% 3.933500 3.993500 3.945250 3.747500 3.672750
50% 7.697500 7.547500 7.504500 7.140500 6.706000
75% 15.050750 14.766250 14.467500 14.142000 13.343000
max 74.485000 74.655000 74.720000 75.416000 76.395000

count 1134.000000 1134.000000 1134.000000 1128.000000 1122.000000 \
mean 10.311452 11.851285 11.422645 10.340361 9.985181
std 10.297952 11.231580 10.873412 10.264810 9.987778
min 0.036000 0.056000 0.064000 0.067000 0.063000
25% 3.538500 4.334500 4.153500 3.555250 3.477500
50% 6.627500 8.067500 7.542500 6.571500 6.466000
75% 13.285500 15.316250 14.881500 13.410000 12.914500
max 77.173000 83.990000 82.135000 78.776000 78.541000

count 1122.000000
mean 9.940089
std 9.977512
min 0.060000
25% 3.459750
50% 6.364000
75% 12.687750
max 78.644000

```

```

import pandas as pd
import matplotlib.pyplot as plt

```

```

# Define year columns
year_columns = ['2014', '2015', '2016', '2017', '2018', '2019', '2020', '2021', '2022', '2023', '2024']

```

```

# Specific values
country = 'India'
indicator = 'Unemployment rate by sex and age'
sex = 'Female'
age_group = '15-24'
age_category = 'Youth'

```

```

# Filter the data for the specific group
filtered_df = df[(df['country_name'] == country) &
                 (df['indicator_name'] == indicator) &
                 (df['sex'] == sex) &
                 (df['age_group'] == age_group) &
                 (df['age_categories'] == age_category)]

```

```

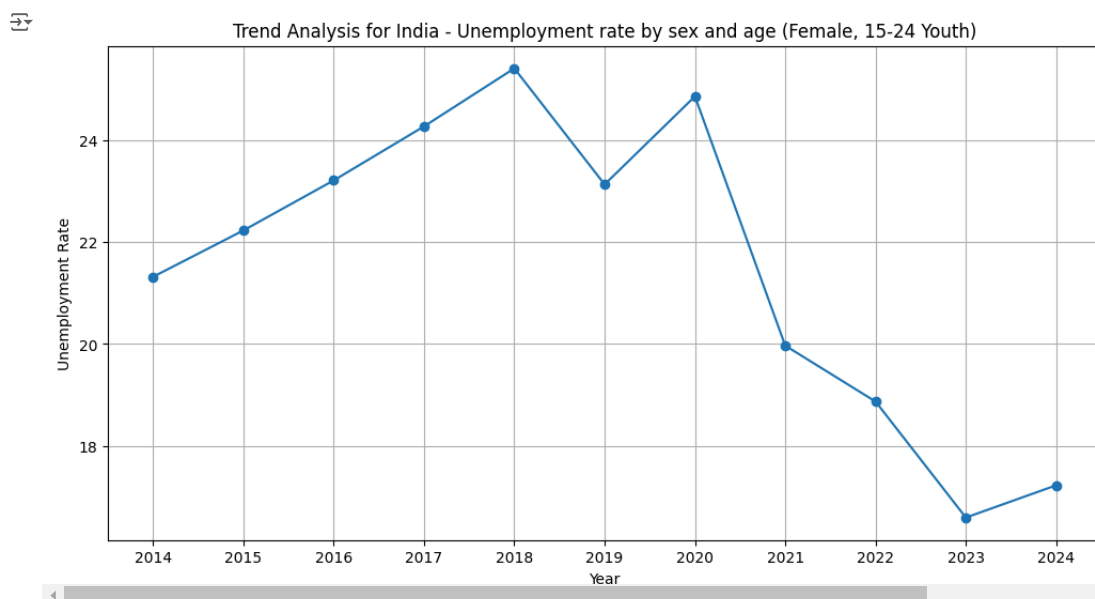
# Check if any data is available for the filtered group
if filtered_df.empty:
    print(f"No data available for {country}, {indicator}, {sex}, {age_group}, {age_category}")
else:
    # If multiple rows match, aggregate them (mean or sum can be used)
    # Here, we use mean to average the values if there are multiple rows
    trend_data = filtered_df[year_columns].mean()

```

```

# Plot the trend over the years
plt.figure(figsize=(12, 6))
plt.plot(year_columns, trend_data, marker='o')
plt.title(f'Trend Analysis for {country} - {indicator} ({sex}, {age_group} {age_category})')
plt.xlabel('Year')
plt.ylabel('Unemployment Rate')
plt.grid(True)
plt.show()

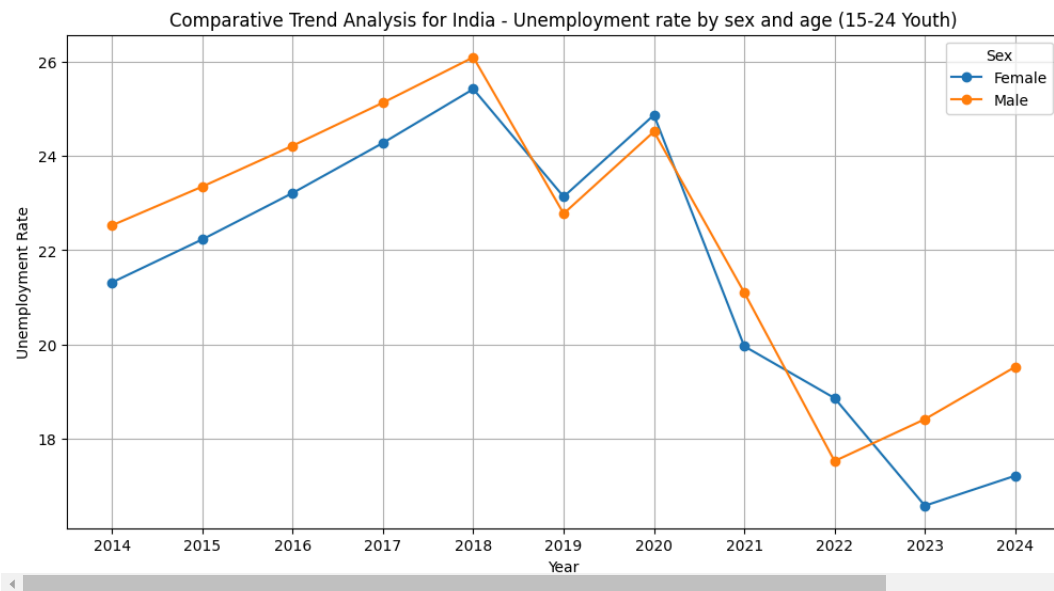
```



```
# Comparison with other groups
sexes = ['Female', 'Male']

plt.figure(figsize=(12, 6))
for sex in sexes:
    group_df = df[(df['country_name'] == country) &
                  (df['indicator_name'] == indicator) &
                  (df['sex'] == sex) &
                  (df['age_group'] == age_group) &
                  (df['age_categories'] == age_category)]
    if not group_df.empty:
        group_trend_data = group_df[year_columns].mean()
        plt.plot(year_columns, group_trend_data, marker='o', label=sex)

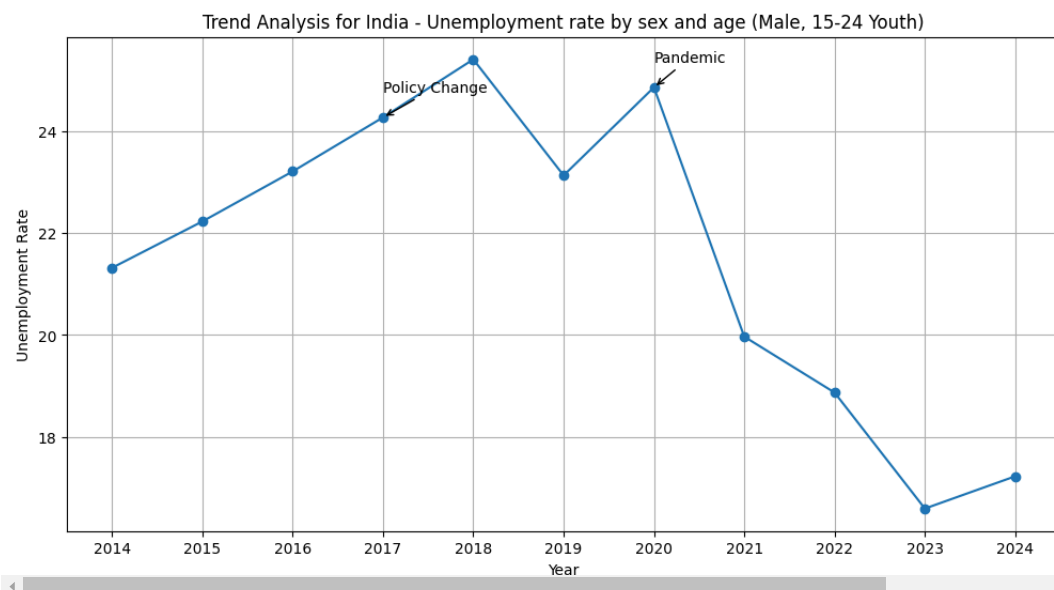
plt.title(f'Comparative Trend Analysis for {country} - {indicator} ({age_group} {age_category})')
plt.xlabel('Year')
plt.ylabel('Unemployment Rate')
plt.legend(title='Sex')
plt.grid(True)
plt.show()
```



```
# Add annotations to the trend line plot
plt.figure(figsize=(12, 6))
plt.plot(year_columns, trend_data, marker='o')
plt.title(f'Trend Analysis for {country} - {indicator} ({sex}, {age_group} {age_category})')
plt.xlabel('Year')
plt.ylabel('Unemployment Rate')
plt.grid(True)

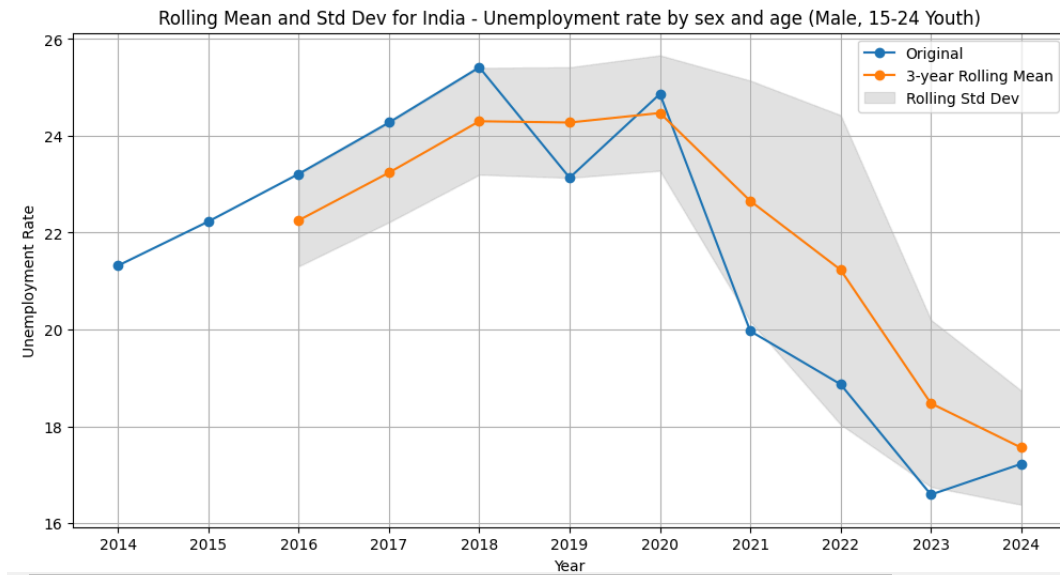
# Example annotations
key_years = {'2017': 'Policy Change', '2020': 'Pandemic'}
for year, event in key_years.items():
    plt.annotate(event, xy=(year, trend_data[year]), xytext=(year, trend_data[year] + 0.5),
                 arrowprops=dict(facecolor='black', arrowstyle='->'))

plt.show()
```



```
# Calculate rolling mean and standard deviation
rolling_window = 3 # 3-year rolling window
rolling_mean = trend_data.rolling(window=rolling_window).mean()
rolling_std = trend_data.rolling(window=rolling_window).std()

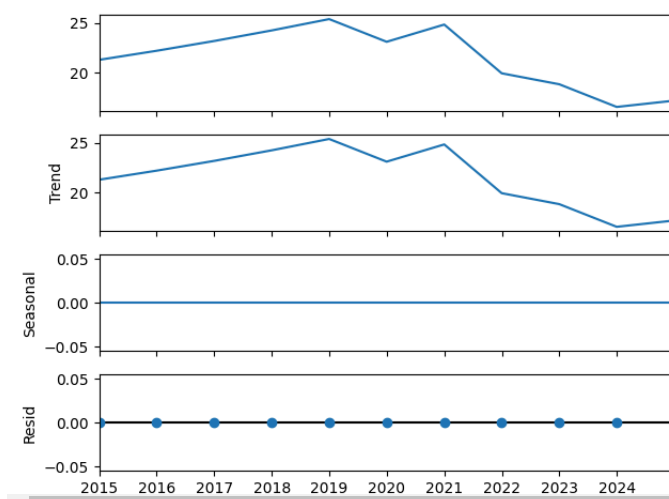
# Plot rolling mean and standard deviation
plt.figure(figsize=(12, 6))
plt.plot(year_columns, trend_data, marker='o', label='Original')
plt.plot(year_columns, rolling_mean, marker='o', label=f'{rolling_window}-year Rolling Mean')
plt.fill_between(year_columns, rolling_mean - rolling_std, rolling_mean + rolling_std, color='gray', alpha=0.2, label='Rolling Std Dev')
plt.title(f'Rolling Mean and Std Dev for {country} - {indicator} ({sex}, {age_group} {age_category})')
plt.xlabel('Year')
plt.ylabel('Unemployment Rate')
plt.legend()
plt.grid(True)
plt.show()
```



```
import statsmodels.api as sm
```

```
# Decompose the time series
trend_data_ts = trend_data.reset_index(drop=True)
trend_data_ts.index = pd.date_range(start='2014', periods=len(trend_data), freq='Y')

decomposition = sm.tsa.seasonal_decompose(trend_data_ts, model='additive')
decomposition.plot()
plt.show()
```





```

import pandas as pd
import matplotlib.pyplot as plt
from prophet import Prophet

# Define year columns
year_columns = ['2014', '2015', '2016', '2017', '2018', '2019', '2020', '2021', '2022', '2023', '2024']

# Specific values
country = 'India'
indicator = 'Unemployment rate by sex and age'
sex = 'Female'
age_group = '15-24'
age_category = 'Youth'

# Filter the data for the specific group
filtered_df = df[(df['country_name'] == country) &
                 (df['indicator_name'] == indicator) &
                 (df['sex'] == sex) &
                 (df['age_group'] == age_group) &
                 (df['age_categories'] == age_category)]

# Check if any data is available for the filtered group
if filtered_df.empty:
    print(f'No data available for {country}, {indicator}, {sex}, {age_group}, {age_category}')
else:
    # If multiple rows match, aggregate them (mean or sum can be used)
    # Here, we use mean to average the values if there are multiple rows
    trend_data = filtered_df[year_columns].mean().reset_index()
    trend_data.columns = ['ds', 'y']
    trend_data['ds'] = pd.to_datetime(trend_data['ds'], format='%Y')

    # Initialize and fit the Prophet model
    model = Prophet()
    model.fit(trend_data)

    # Create a DataFrame for future dates
    future = model.make_future_dataframe(periods=5, freq='Y')
    forecast = model.predict(future)

    # Plot the forecast
    fig, ax = plt.subplots(figsize=(12, 6))

    # Plot historical data
    ax.plot(trend_data['ds'], trend_data['y'], 'o', label='Observed')

    # Plot forecast data
    ax.plot(forecast['ds'], forecast['yhat'], 'r-', label='Forecast')

    # Plot confidence intervals
    ax.fill_between(forecast['ds'], forecast['yhat_lower'], forecast['yhat_upper'], color='pink', alpha=0.5, label='Confidence Interval')

    # Add title and labels
    ax.set_title(f'Forecasting Unemployment Rate for {country} ({sex}, {age_group} {age_category})')
    ax.set_xlabel('Year')
    ax.set_ylabel('Unemployment Rate')
    ax.legend()

plt.grid(True)
plt.show()

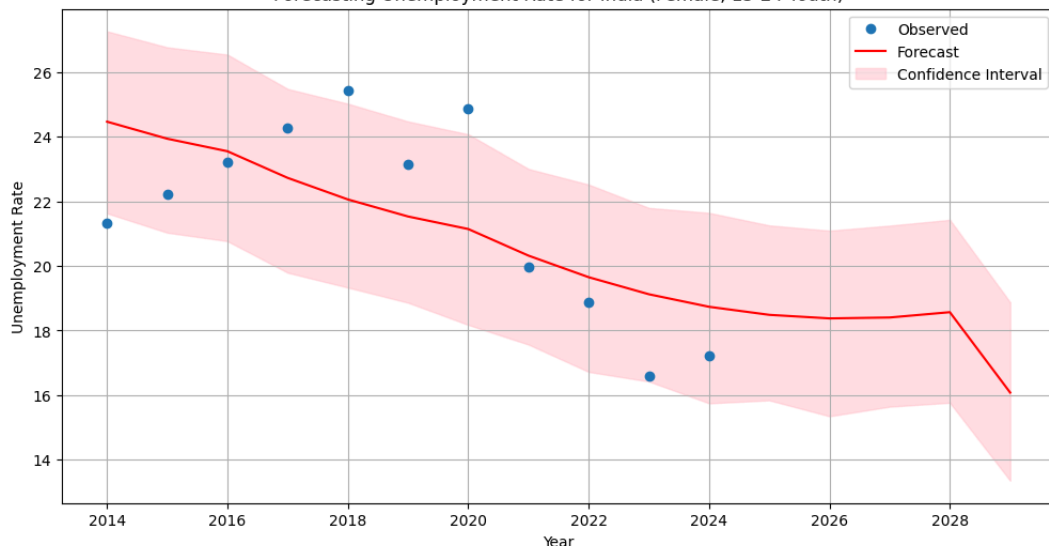
```

```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpt7b3g5s2/z3z6_bwc.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpt7b3g5s2/1puv59vz.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=38969', 'data', 'file=/tmp/tmpt7b3g5s2/']
15:32:00 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:32:00 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing

```

Forecasting Unemployment Rate for India (Female, 15-24 Youth)



```

import pandas as pd
import matplotlib.pyplot as plt
from prophet import Prophet

file_path = '/content/drive/My Drive/global_unemployment_data.csv'

# Load the dataset
df = pd.read_csv(file_path)

# Define year columns
year_columns = ['2014', '2015', '2016', '2017', '2018', '2019', '2020', '2021', '2022', '2023', '2024']

# List of countries in the dataset
countries = df['country_name'].unique()

# Plot size settings
fig_width = 10
fig_height = 5

# Forecast for each country
for country in countries:
    print(f"Processing {country}...")

    # Filter the data for the current country
    filtered_df = df[(df['country_name'] == country) &
                     (df['indicator_name'] == 'Unemployment rate by sex and age') &
                     (df['sex'] == 'Female') &
                     (df['age_group'] == '15-24') &
                     (df['age_categories'] == 'Youth')]

    # Check if any data is available for the filtered group
    if filtered_df.empty:
        print(f"No data available for {country}")
        continue

    # If multiple rows match, aggregate them (mean or sum can be used)
    # Here, we use mean to average the values if there are multiple rows
    trend_data = filtered_df[year_columns].mean().reset_index()
    trend_data.columns = ['ds', 'y']
    trend_data['ds'] = pd.to_datetime(trend_data['ds'], format='%Y')

    # Initialize and fit the Prophet model
    model = Prophet()
    model.fit(trend_data)

    # Create a DataFrame for future dates
    future = model.make_future_dataframe(periods=5, freq='Y')
    forecast = model.predict(future)

    # Plot the trend and forecast
    fig, ax = plt.subplots(figsize=(fig_width, fig_height))

    # Plot historical data
    ax.plot(trend_data['ds'], trend_data['y'], 'o', label='Observed')

    # Plot forecast data
    ax.plot(forecast['ds'], forecast['yhat'], 'r-', label='Forecast')

    # Plot confidence intervals
    ax.fill_between(forecast['ds'], forecast['yhat_lower'], forecast['yhat_upper'], color='pink', alpha=0.5, label='Confidence Interval')

    # Add title and labels
    ax.set_title(f'Forecasting Unemployment Rate for {country} (Female, 15-24 Youth)')
    ax.set_xlabel('Year')
    ax.set_ylabel('Unemployment Rate')
    ax.legend()

    plt.grid(True)
    plt.tight_layout()
    plt.show()

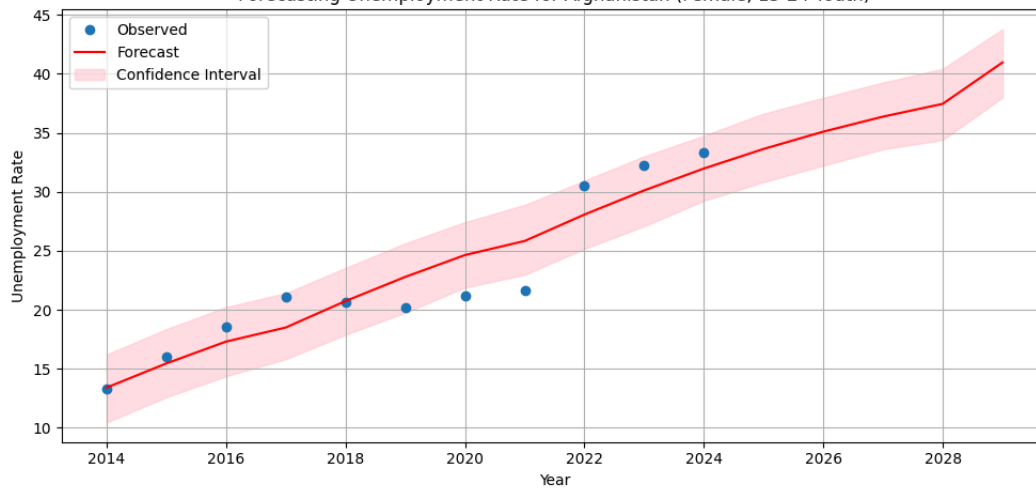
```

```

Processing Afghanistan...
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/apkoh6e6.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/jc70ji6a.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=31470', 'data', 'file=/tmp/tmpgvabj79_']
15:36:39 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:39 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing

```

Forecasting Unemployment Rate for Afghanistan (Female, 15-24 Youth)

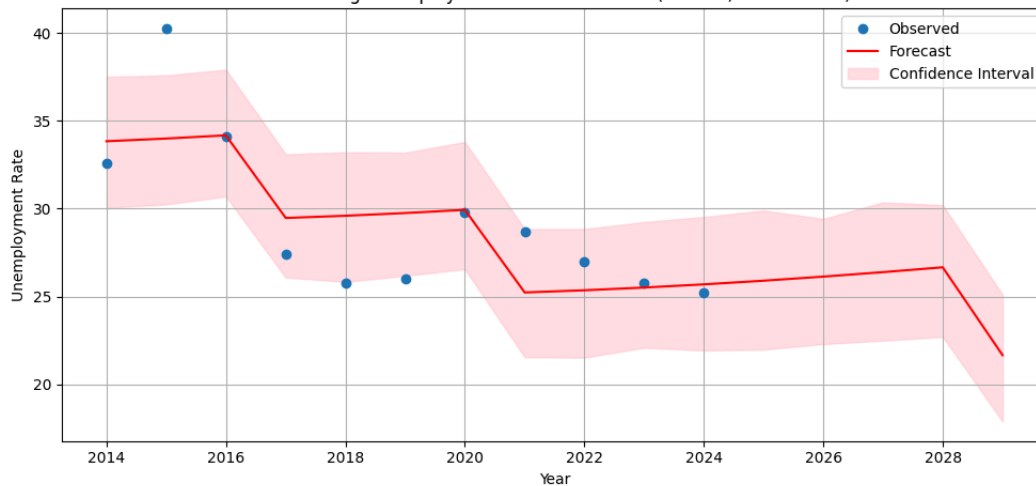


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/it646jjl.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/1obmzd9e.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=11470', 'data', 'file=/tmp/tmpgvabj79_']
15:36:41 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:41 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Albania...

```

Forecasting Unemployment Rate for Albania (Female, 15-24 Youth)

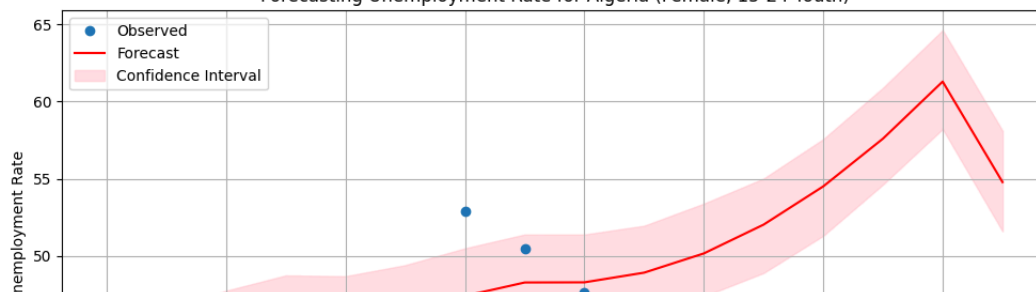


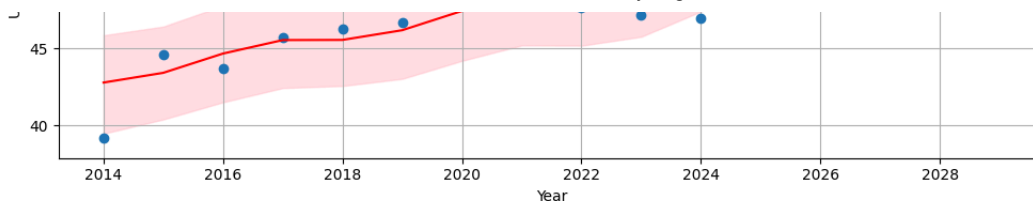
```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/9ce4wi8q.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/vmyhri5_.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=10408', 'data', 'file=/tmp/tmpgvabj79_']
15:36:42 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:42 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Algeria...

```

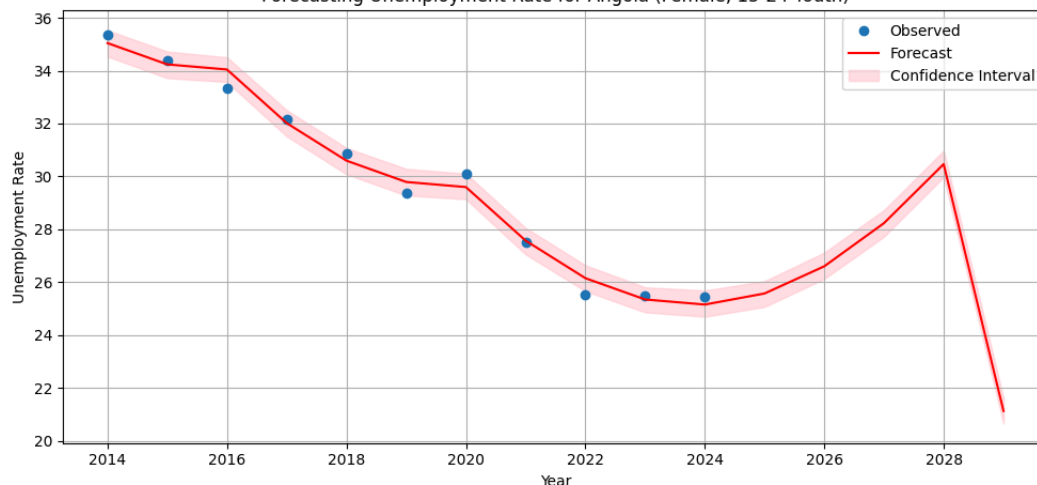
Forecasting Unemployment Rate for Algeria (Female, 15-24 Youth)





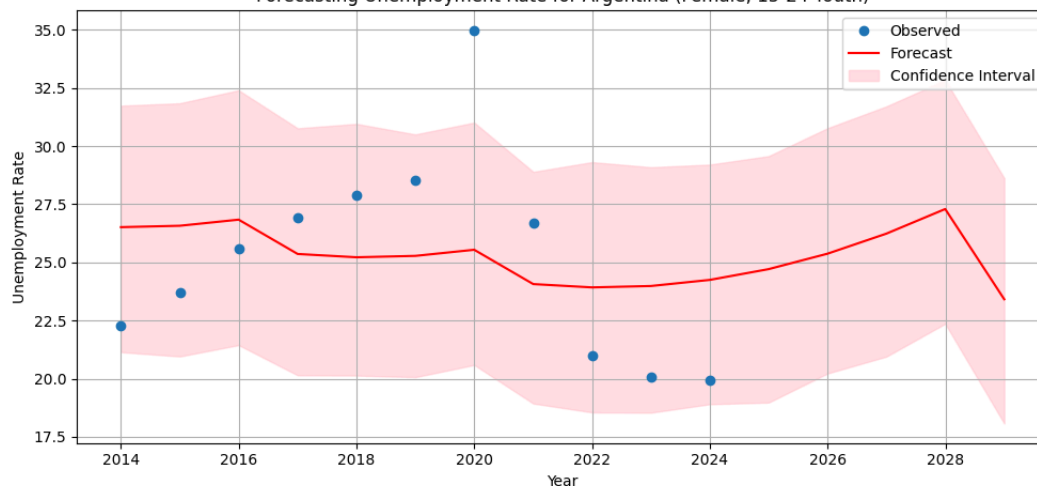
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/_n36u0r7.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/_ed2xfwo3.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=54852', 'data', 'file=/tmp/tmpgvabj79']
15:36:43 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:43 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Angola...
```

Forecasting Unemployment Rate for Angola (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/_pkt6bu2p.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/_n3p5outn.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=65321', 'data', 'file=/tmp/tmpgvabj79']
15:36:43 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:43 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Argentina...
```

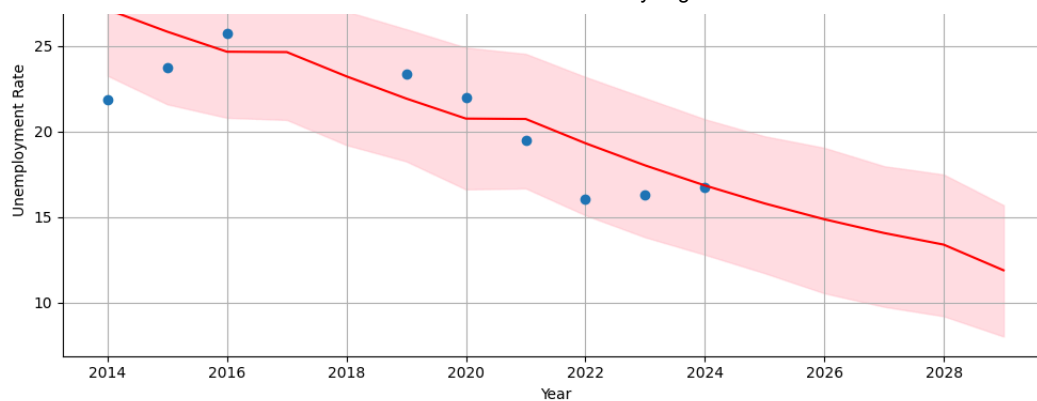
Forecasting Unemployment Rate for Argentina (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/_ophmna8x.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/_d1sek7p7.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=56572', 'data', 'file=/tmp/tmpgvabj79']
15:36:44 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:44 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Armenia...
```

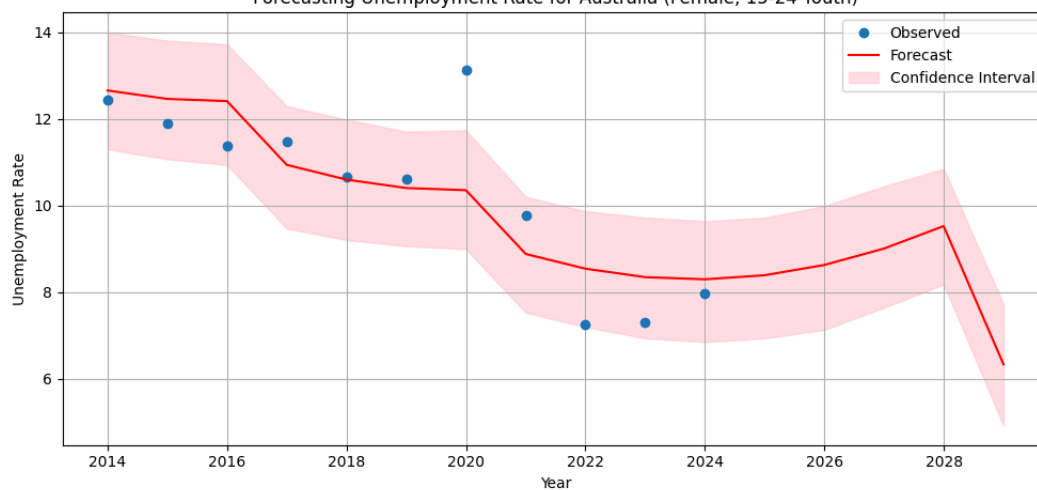
Forecasting Unemployment Rate for Armenia (Female, 15-24 Youth)





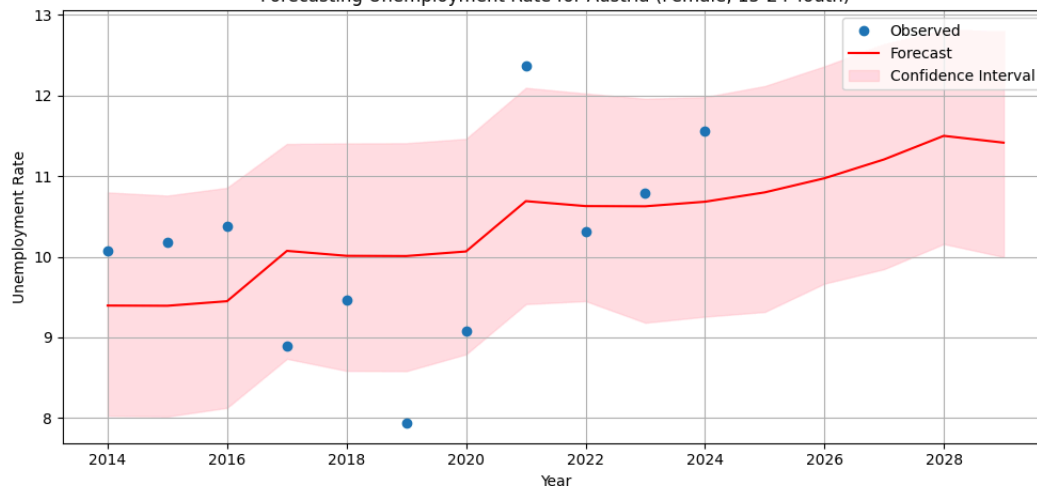
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/tlqo_jpi.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/f2jbcfhw.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=3251', 'data', 'file=/tmp/tmpgvabj79_
15:36:45 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:45 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Australia...
```

Forecasting Unemployment Rate for Australia (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/xryt94g6.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/s7qfy9qz.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=32457', 'data', 'file=/tmp/tmpgvabj79_
15:36:45 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:45 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Austria...
```

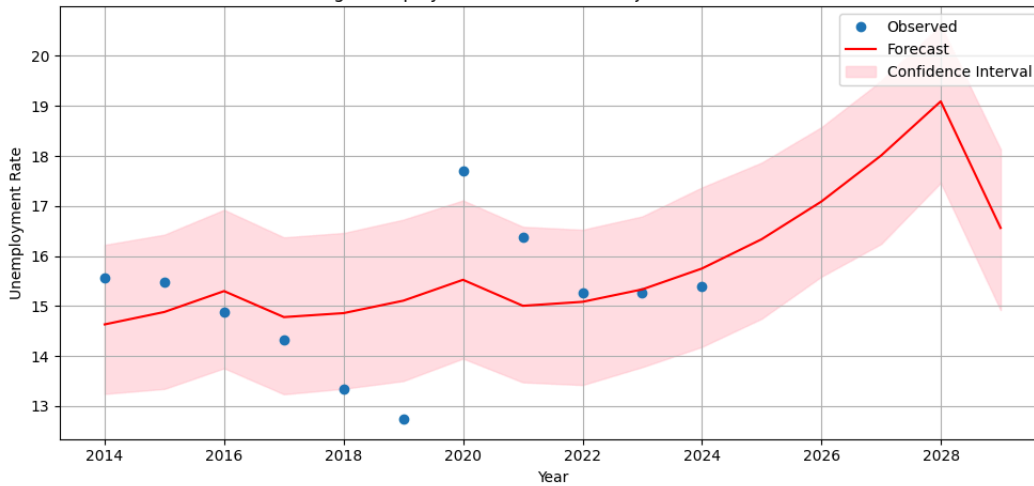
Forecasting Unemployment Rate for Austria (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/0guhxfx_.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/dg380nxf.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=61890', 'data', 'file=/tmp/tmpgvabj79_
15:36:46 - cmdstanpy - INFO - Chain [1] start processing
```

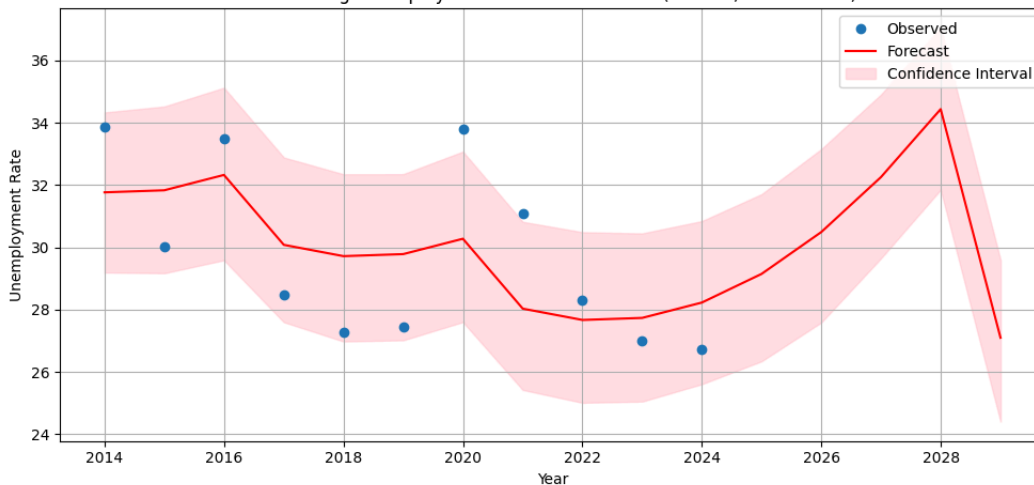
```
INFO:cmdstanpy:Chain [1] start processing
15:36:46 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Azerbaijan...
```

Forecasting Unemployment Rate for Azerbaijan (Female, 15-24 Youth)



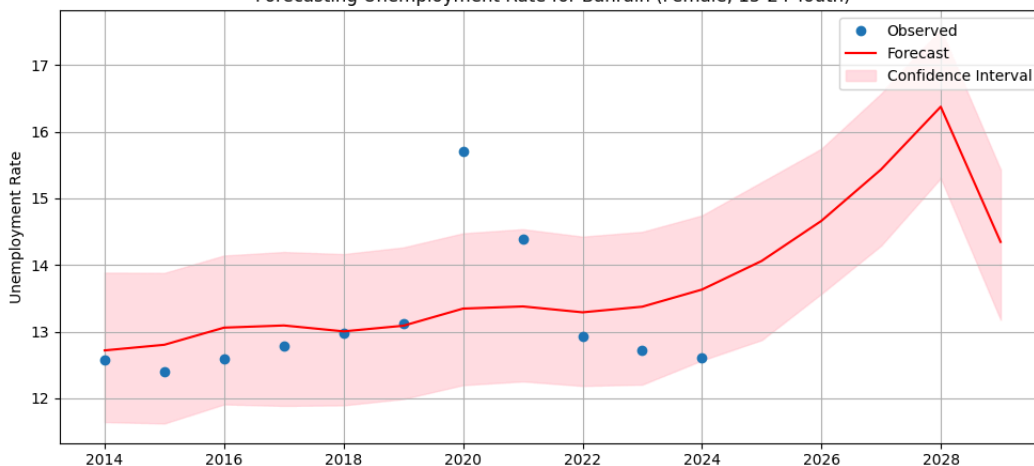
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/h0hijk0z.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/s4cl95b7.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=33415', 'data', 'file=/tmp/tmpgvabj79/']
15:36:46 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:47 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bahamas...
```

Forecasting Unemployment Rate for Bahamas (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/u66of3e_.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/xt_46orf.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=21083', 'data', 'file=/tmp/tmpgvabj79/']
15:36:47 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:47 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bahrain...
```

Forecasting Unemployment Rate for Bahrain (Female, 15-24 Youth)



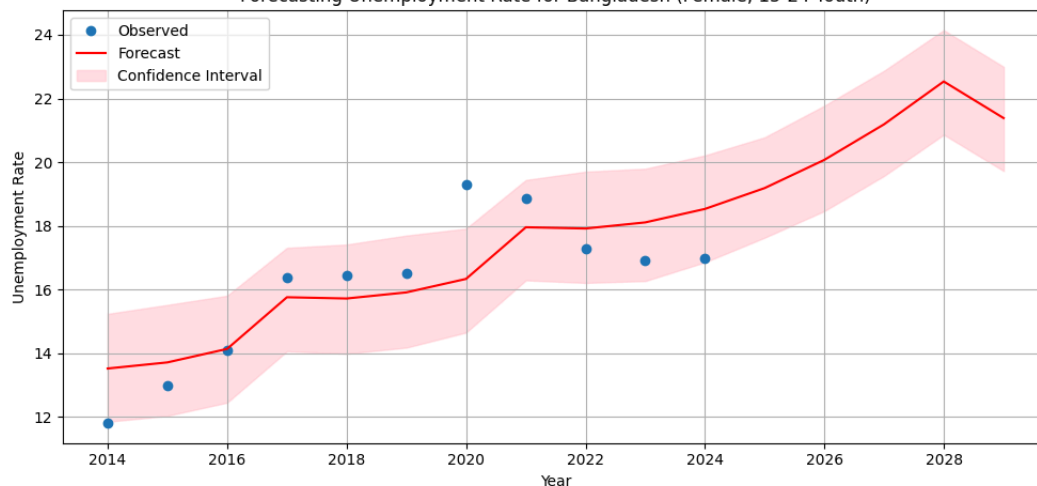
Year

```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/ft95fz0k.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/7kba8anq.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=43790', 'data', 'file=/tmp/tmpgvabj79_']
15:36:48 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:48 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bangladesh...

```

Forecasting Unemployment Rate for Bangladesh (Female, 15-24 Youth)

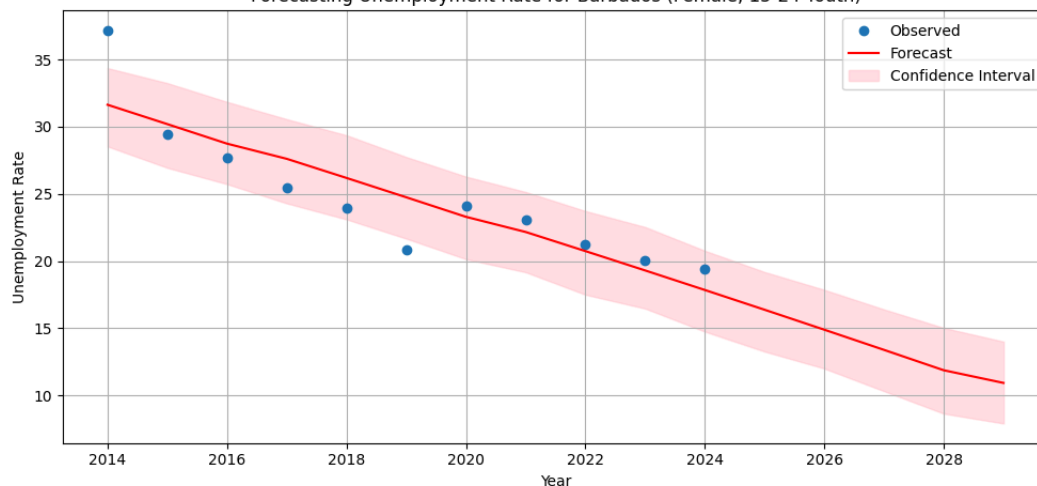


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/e8r4ale8.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/uwrjyc3z.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=38164', 'data', 'file=/tmp/tmpgvabj79_']
15:36:48 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:49 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Barbados...

```

Forecasting Unemployment Rate for Barbados (Female, 15-24 Youth)

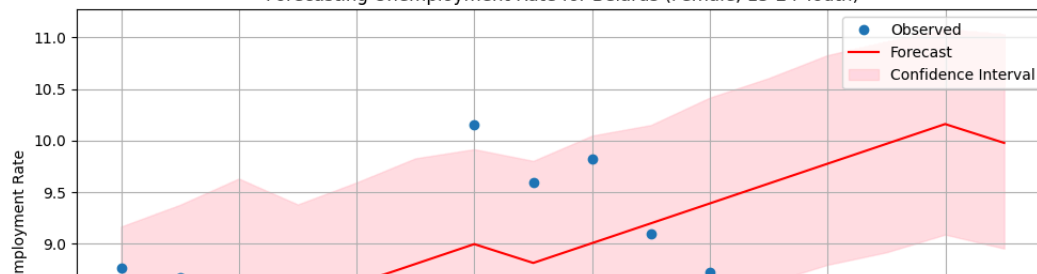


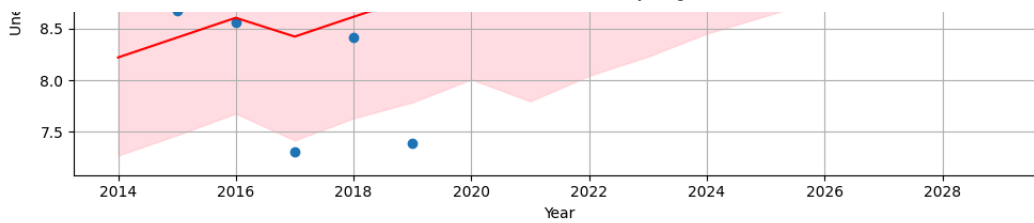
```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/tzsdyidh.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/a_lne5zh.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=34011', 'data', 'file=/tmp/tmpgvabj79_']
15:36:49 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:49 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Belarus...

```

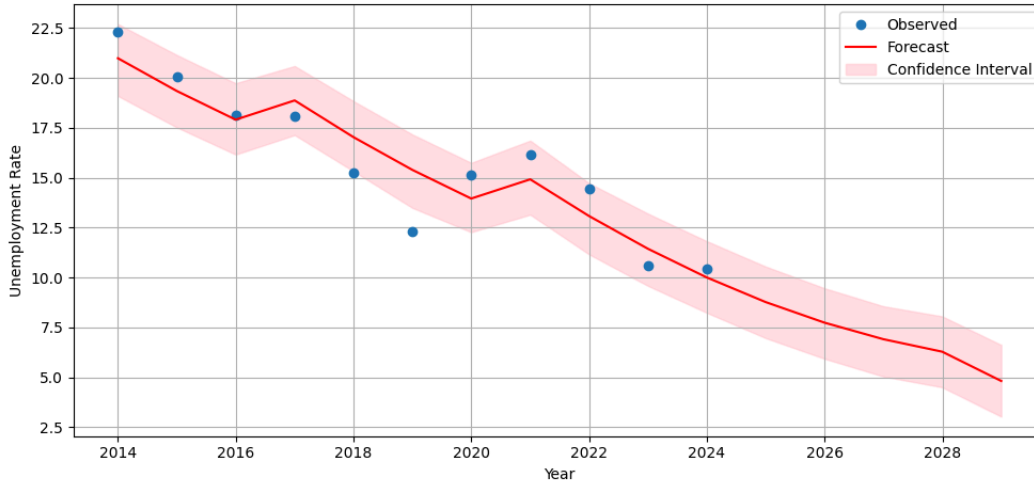
Forecasting Unemployment Rate for Belarus (Female, 15-24 Youth)





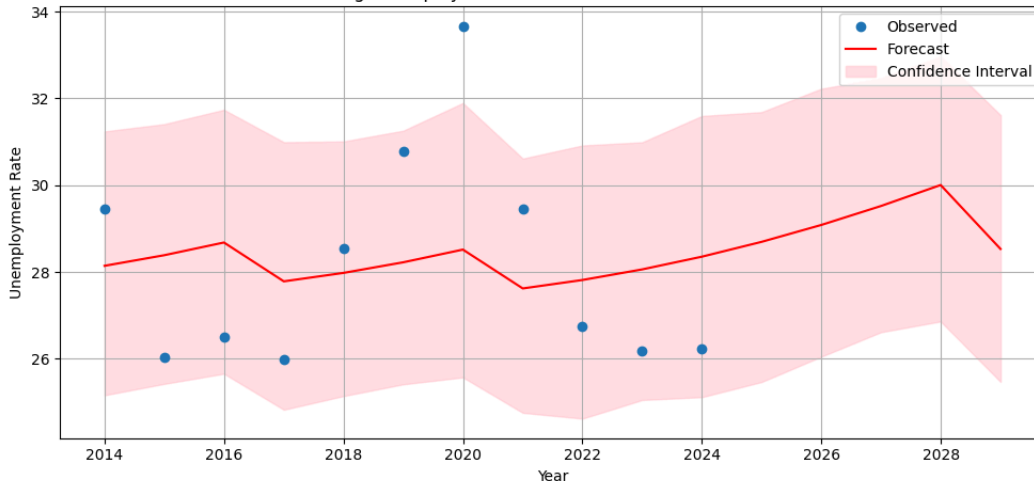
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/ydz8z5a8.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/1uvqfz_l.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=78870', 'data', 'file=/tmp/tmpgvabj79_/ydz8z5a8.json']
15:36:50 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:50 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Belgium...
```

Forecasting Unemployment Rate for Belgium (Female, 15-24 Youth)



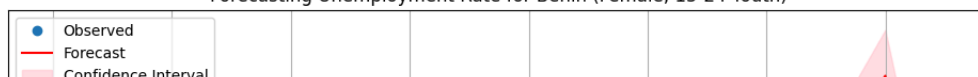
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/qkcczd5.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/gqt5iz7c.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=31898', 'data', 'file=/tmp/tmpgvabj79_/qkcczd5.json']
15:36:51 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:51 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Belize...
```

Forecasting Unemployment Rate for Belize (Female, 15-24 Youth)

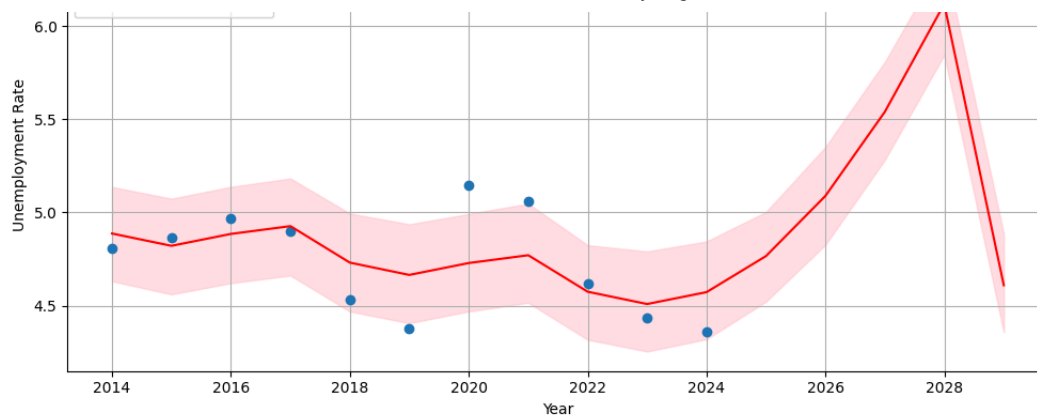


```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/knuetlm9.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/6i_15x_2.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=73068', 'data', 'file=/tmp/tmpgvabj79_/knuetlm9.json']
15:36:51 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:51 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Benin...
```

Forecasting Unemployment Rate for Benin (Female, 15-24 Youth)

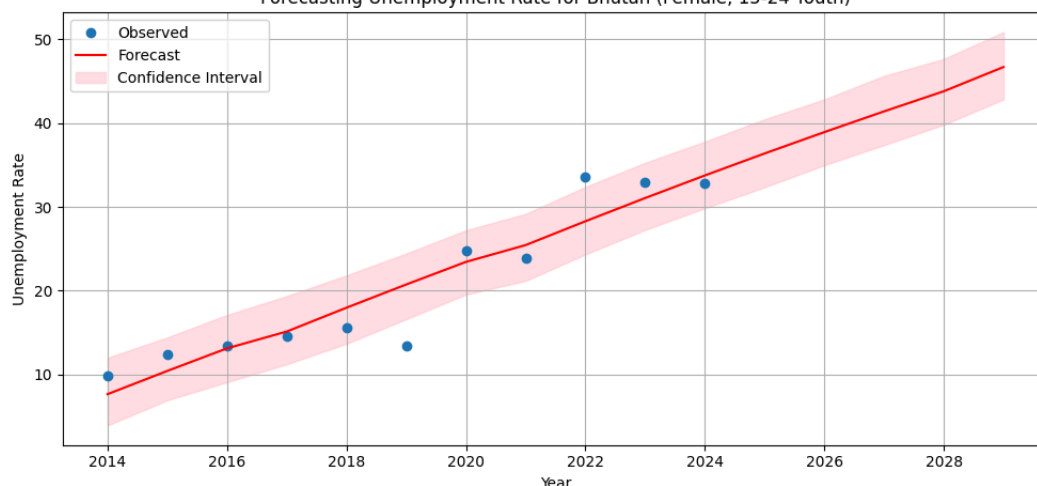






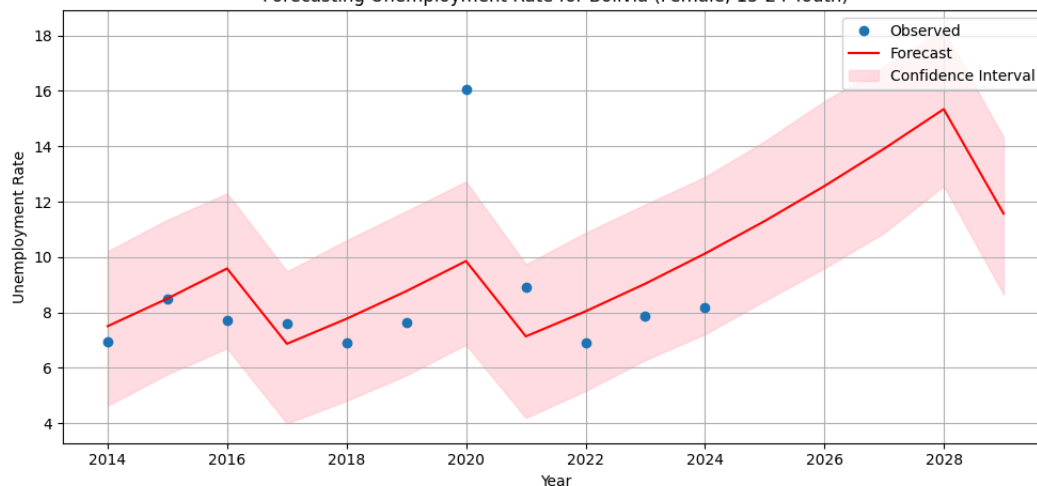
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/k4ona2vv.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/nm5lrbo4.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=97421', 'data', 'file=/tmp/tmpgvabj79_']
15:36:52 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:52 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bhutan...
```

Forecasting Unemployment Rate for Bhutan (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/6x4c8awi.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/w0_r80ug.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=57074', 'data', 'file=/tmp/tmpgvabj79_']
15:36:53 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:53 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bolivia...
```

Forecasting Unemployment Rate for Bolivia (Female, 15-24 Youth)



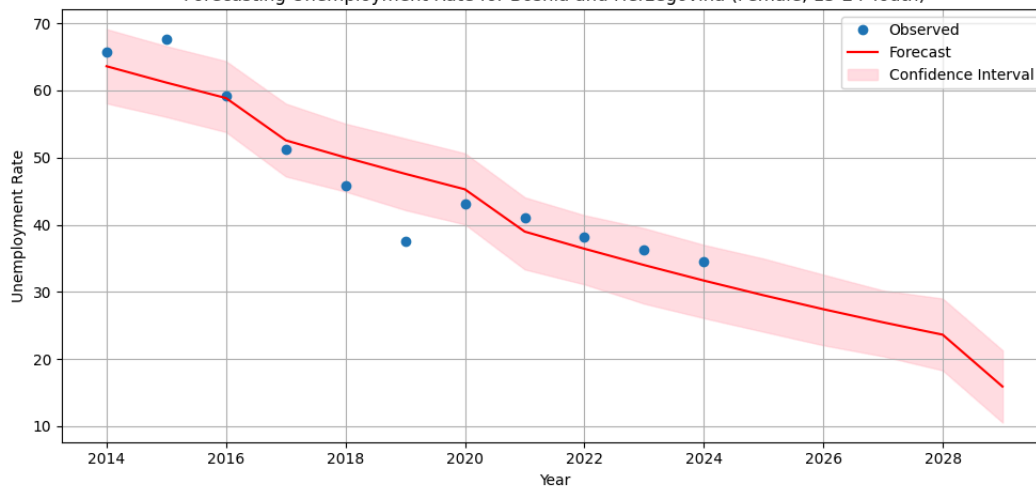
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/zf09i0j_.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/jchscmaa.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=6053', 'data', 'file=/tmp/tmpgvabj79_']
```

```

15:36:54 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:54 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bosnia and Herzegovina...

```

Forecasting Unemployment Rate for Bosnia and Herzegovina (Female, 15-24 Youth)

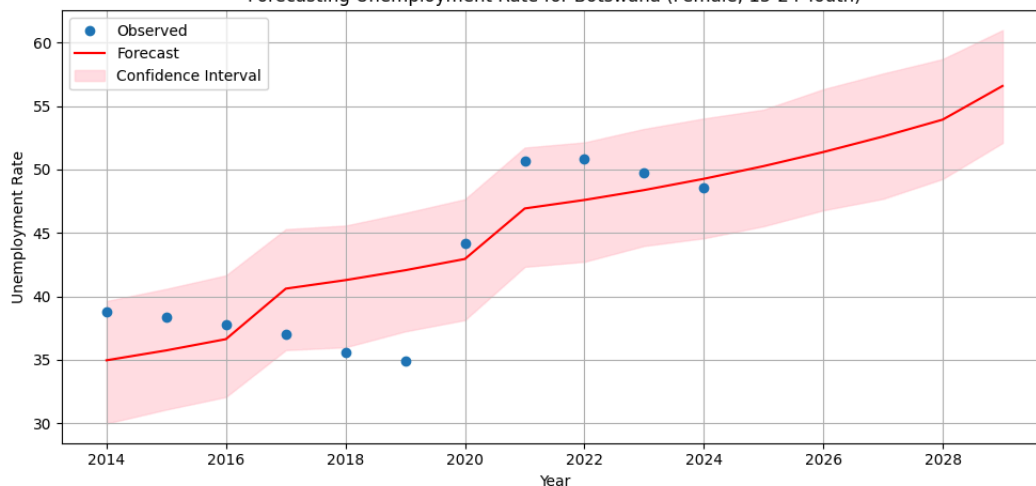


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_pid3fznw.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_4dzrm97b.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=58721', 'data', 'file=/tmp/tmpgvabj79_4dzrm97b.json']
15:36:55 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:55 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Botswana...

```

Forecasting Unemployment Rate for Botswana (Female, 15-24 Youth)

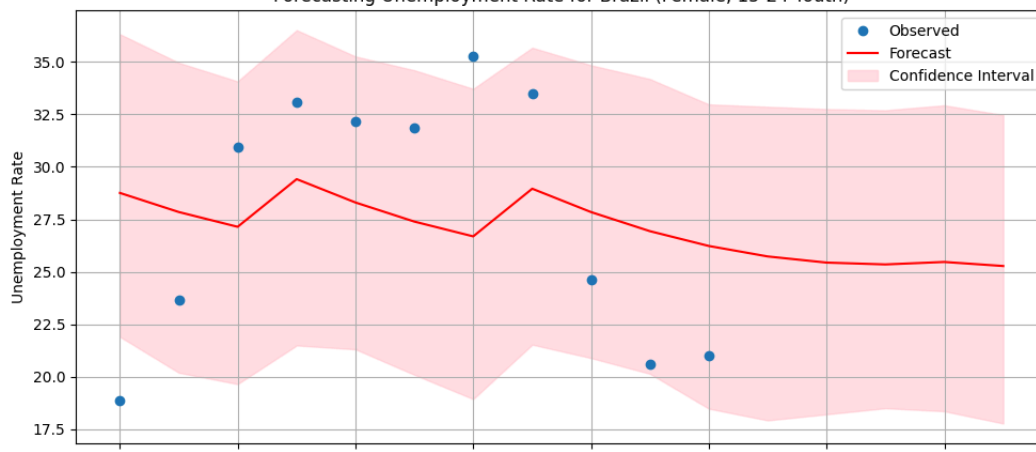


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_3394kzji.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_wvbim44.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=49699', 'data', 'file=/tmp/tmpgvabj79_wvbim44.json']
15:36:56 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:56 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Brazil...

```

Forecasting Unemployment Rate for Brazil (Female, 15-24 Youth)

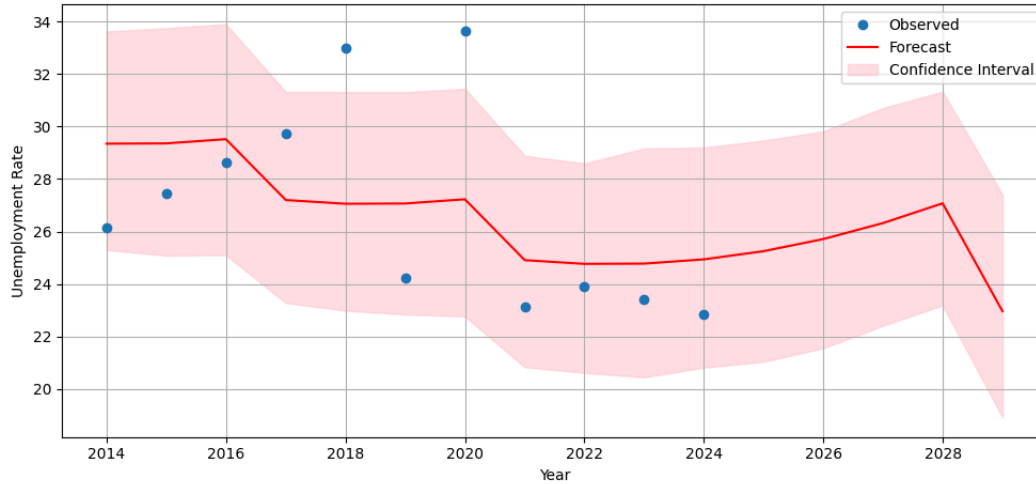


```

2014      2010      2018      2020      2022      2024      2026      2028
Year
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/c16mcx1e.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/np830mbf.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=12595', 'data', 'file=/tmp/tmpgvabj79_
15:36:57 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:57 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Brunei Darussalam...

```

Forecasting Unemployment Rate for Brunei Darussalam (Female, 15-24 Youth)

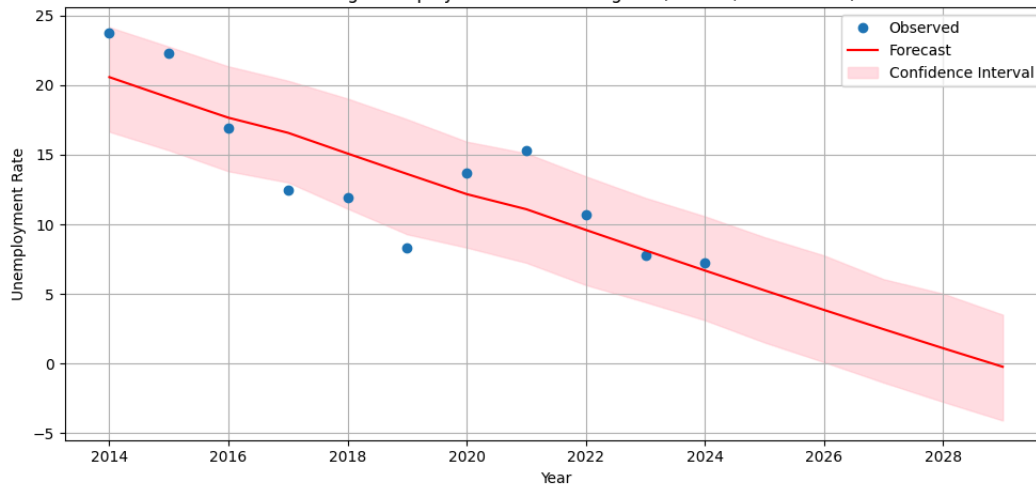


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/dq1pr170.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/qfeudqux.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=3686', 'data', 'file=/tmp/tmpgvabj79_
15:36:58 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:58 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Bulgaria...

```

Forecasting Unemployment Rate for Bulgaria (Female, 15-24 Youth)



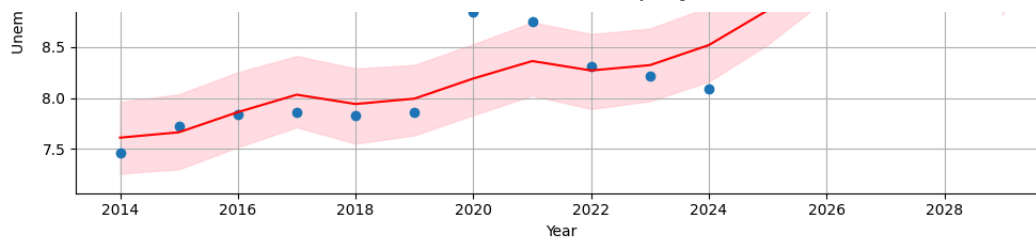
```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/whbgcyv1.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/zg7mybth.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=42937', 'data', 'file=/tmp/tmpgvabj79_
15:36:58 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:36:58 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Burkina Faso...

```

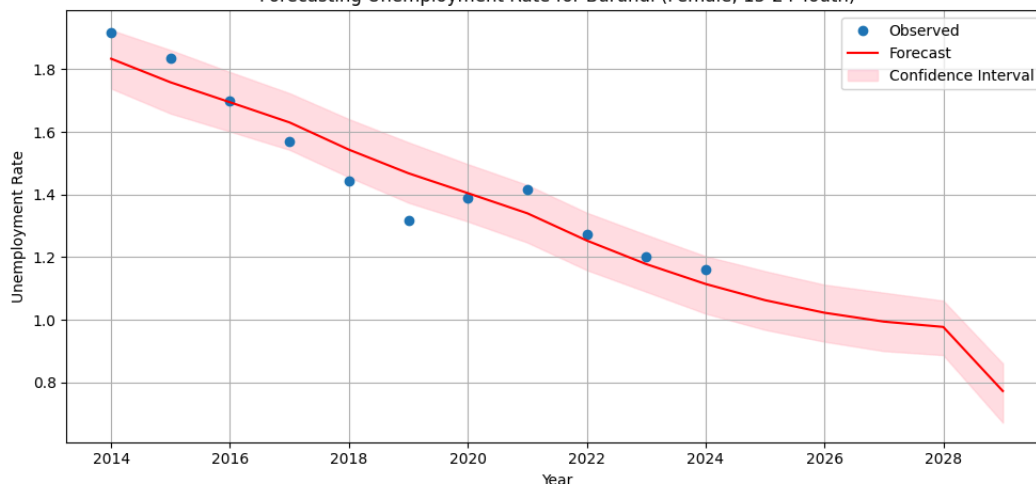
Forecasting Unemployment Rate for Burkina Faso (Female, 15-24 Youth)





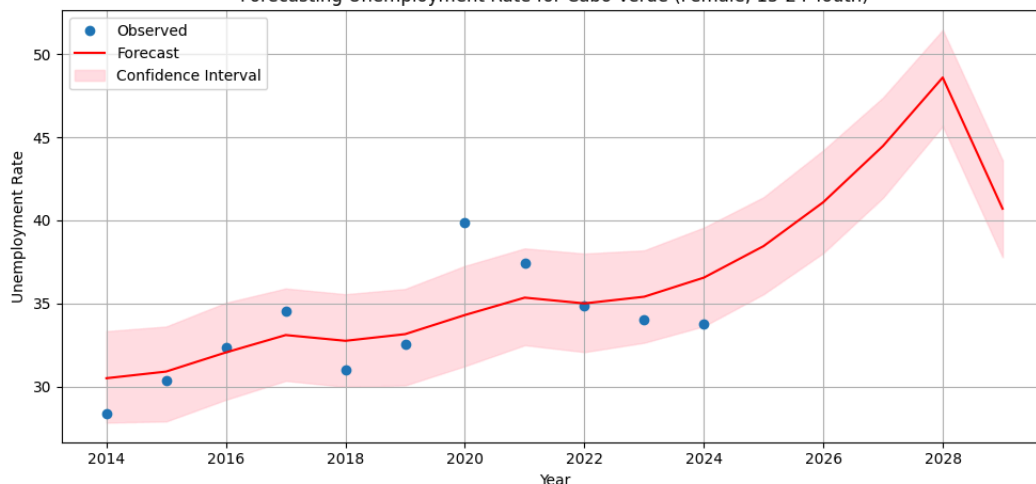
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/k3l9k8o1.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/zr0bwpa2.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=37439', 'data', 'file=/tmp/tmpgvabj79_/k3l9k8o1.json']
15:36:59 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
Processing Burundi...
15:36:59 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
```

Forecasting Unemployment Rate for Burundi (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/0rze6a8x.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/h_ki9qwr.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=50897', 'data', 'file=/tmp/tmpgvabj79_/0rze6a8x.json']
15:37:00 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:00 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Cabo Verde...
```

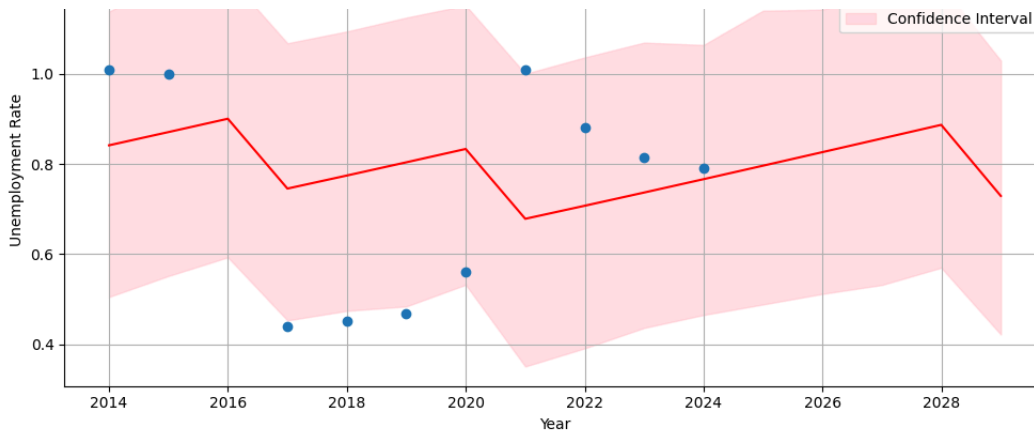
Forecasting Unemployment Rate for Cabo Verde (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/aud3sfum.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/762giyve.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=24218', 'data', 'file=/tmp/tmpgvabj79_/aud3sfum.json']
15:37:01 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
Processing Cambodia...
15:37:01 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
```

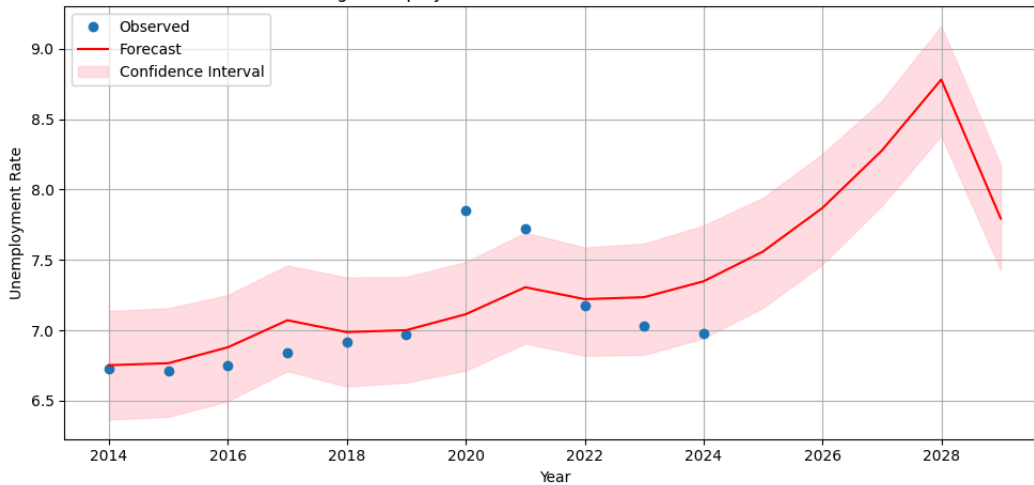
Forecasting Unemployment Rate for Cambodia (Female, 15-24 Youth)





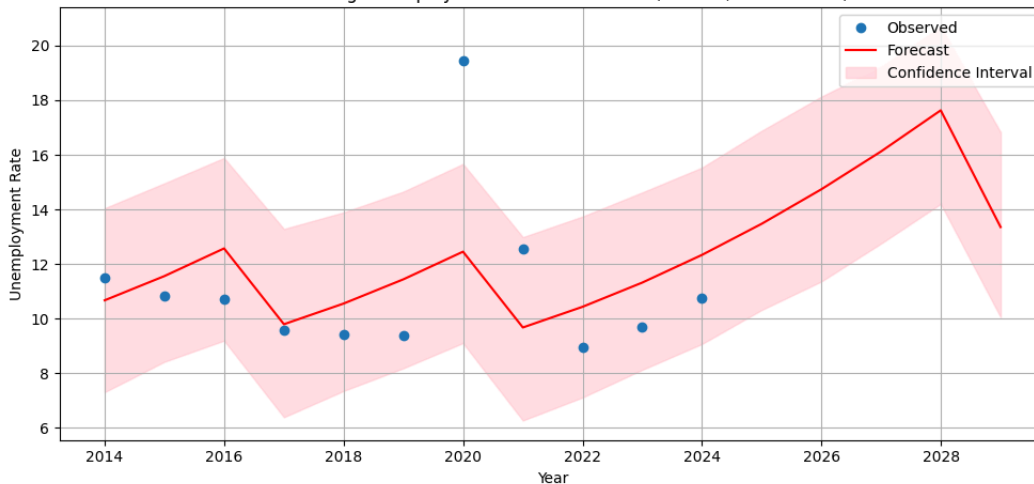
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/4ck09frl.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/g3zw8atq.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=19029', 'data', 'file=/tmp/tmpgvabj79_/4ck09frl.json']
15:37:01 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:01 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Cameroon...
```

Forecasting Unemployment Rate for Cameroon (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/zwb515ih.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/s6wubxi7.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=85695', 'data', 'file=/tmp/tmpgvabj79_/zwb515ih.json']
15:37:02 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:02 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Canada...
```

Forecasting Unemployment Rate for Canada (Female, 15-24 Youth)



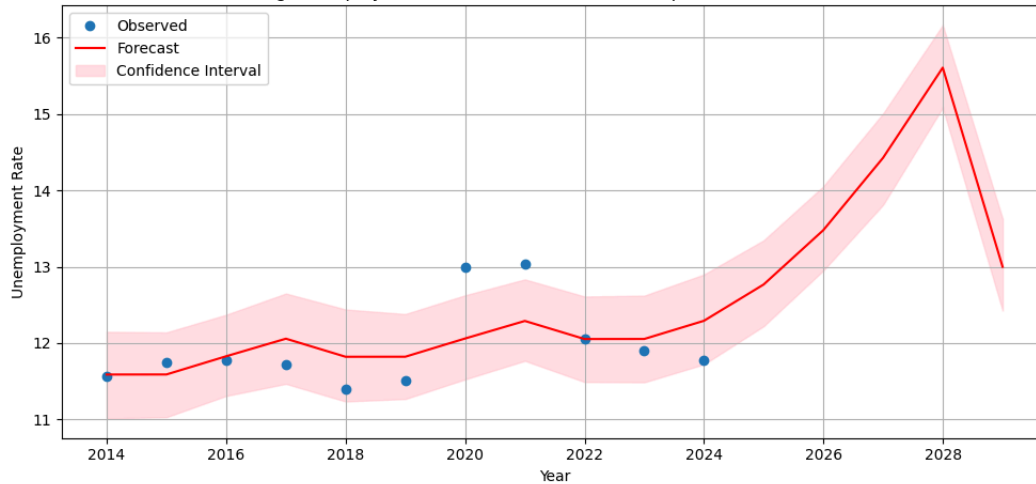
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/u1h5566z.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/jq14kb4n.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
```

```

DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=51246', 'data', 'file=/tmp/tmpgvabj79
15:37:03 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:03 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Central African Republic...

```

Forecasting Unemployment Rate for Central African Republic (Female, 15-24 Youth)

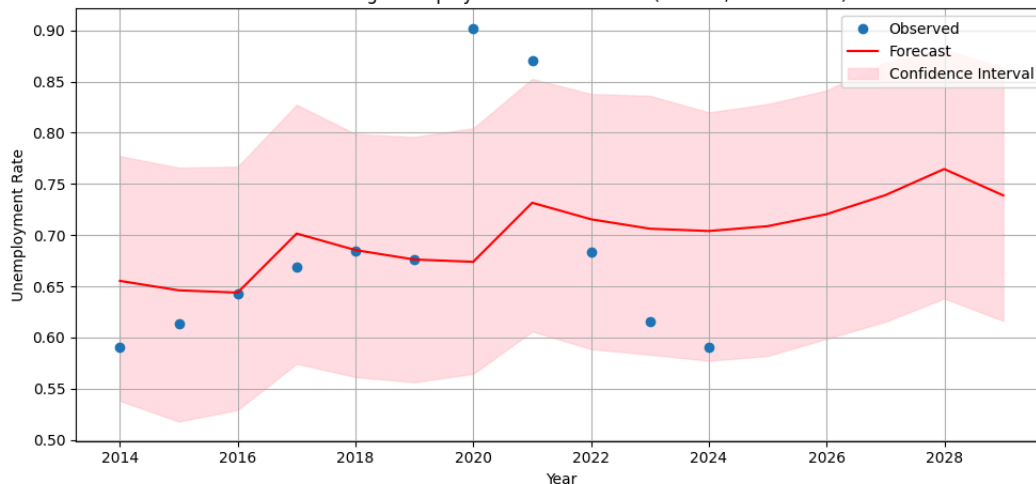


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/drweuh6k.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/dsarenqe.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=60389', 'data', 'file=/tmp/tmpgvabj79
15:37:04 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:04 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Chad...

```

Forecasting Unemployment Rate for Chad (Female, 15-24 Youth)

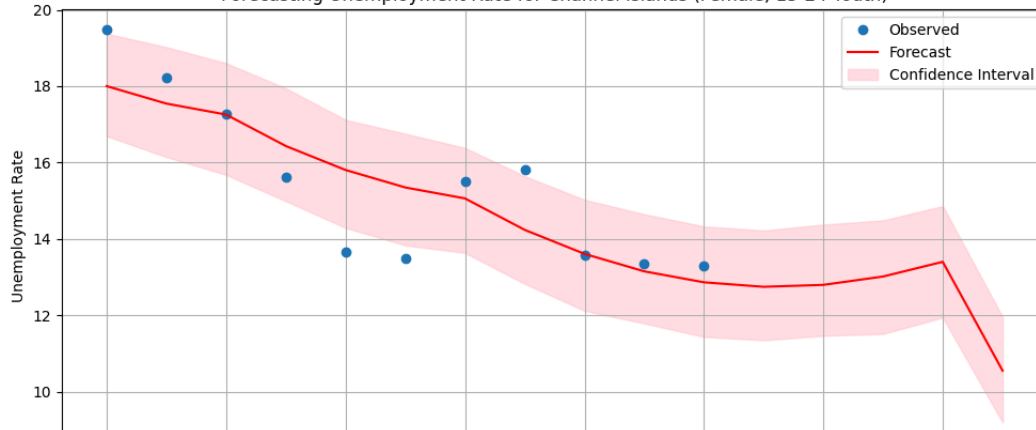


```

INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/p11ybpez.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79/ssvzafxx.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=23665', 'data', 'file=/tmp/tmpgvabj79
15:37:05 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:05 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Channel Islands...

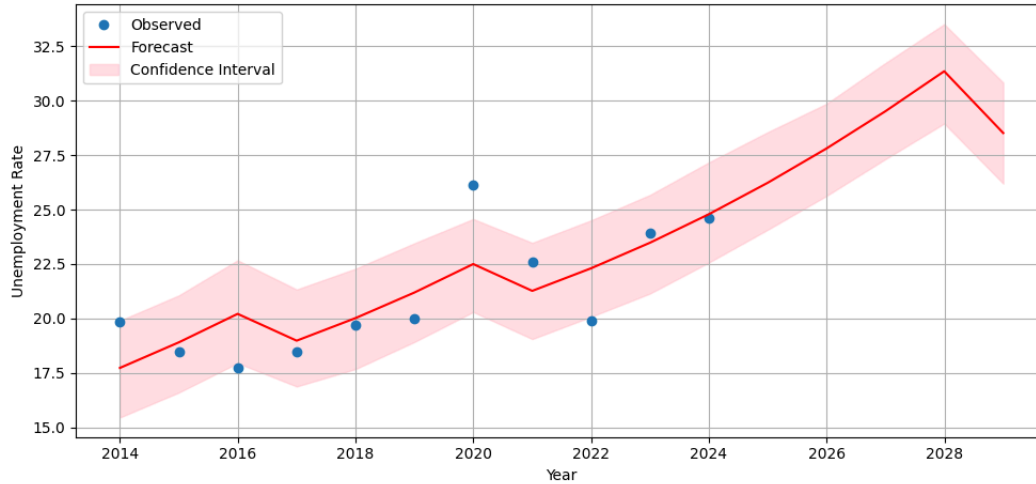
```

Forecasting Unemployment Rate for Channel Islands (Female, 15-24 Youth)



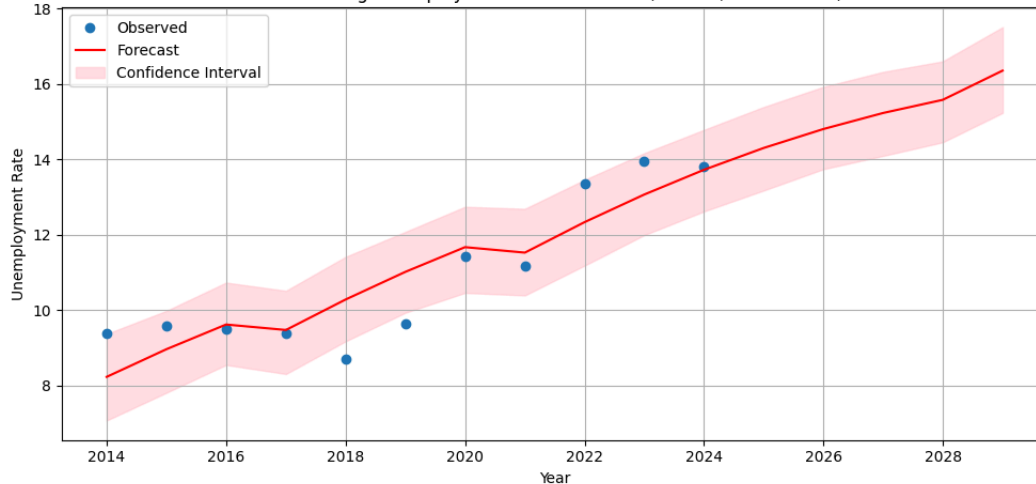
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/gwcakcg6.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/ncnvd6ma.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=99675', 'data', 'file=/tmp/tmpgvabj79_/gwcakcg6.json']
15:37:05 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:05 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Chile...
```

Forecasting Unemployment Rate for Chile (Female, 15-24 Youth)



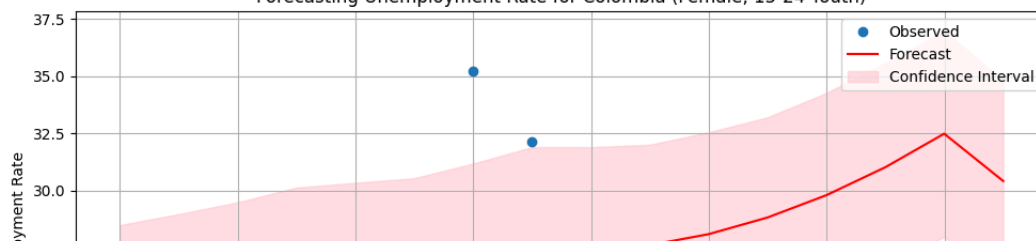
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/2vxm63wg.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/v5kjjuon9.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=10648', 'data', 'file=/tmp/tmpgvabj79_/2vxm63wg.json']
15:37:06 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:06 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing China...
```

Forecasting Unemployment Rate for China (Female, 15-24 Youth)

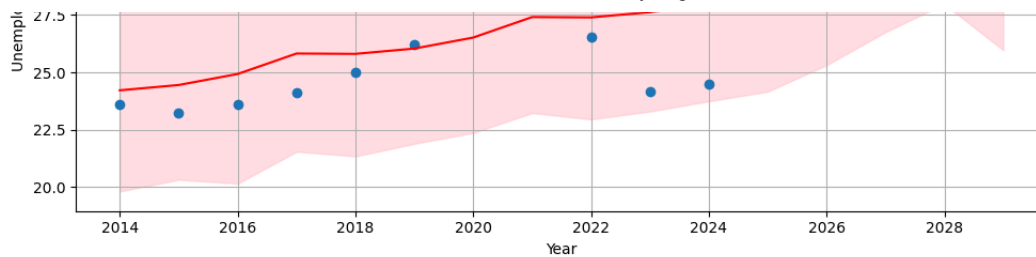


```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/1bnd8mb6.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/mwzhmti7.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=99816', 'data', 'file=/tmp/tmpgvabj79_/1bnd8mb6.json']
15:37:07 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:07 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Colombia...
```

Forecasting Unemployment Rate for Colombia (Female, 15-24 Youth)

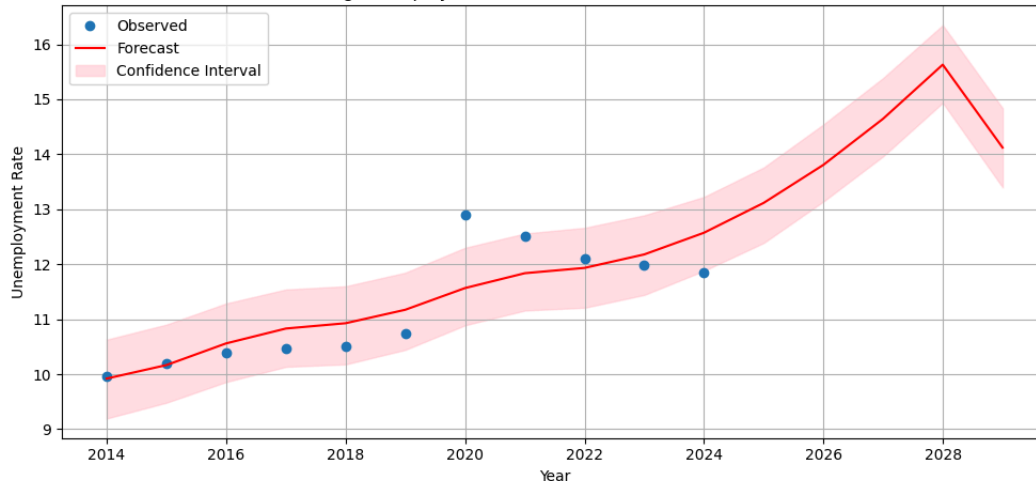






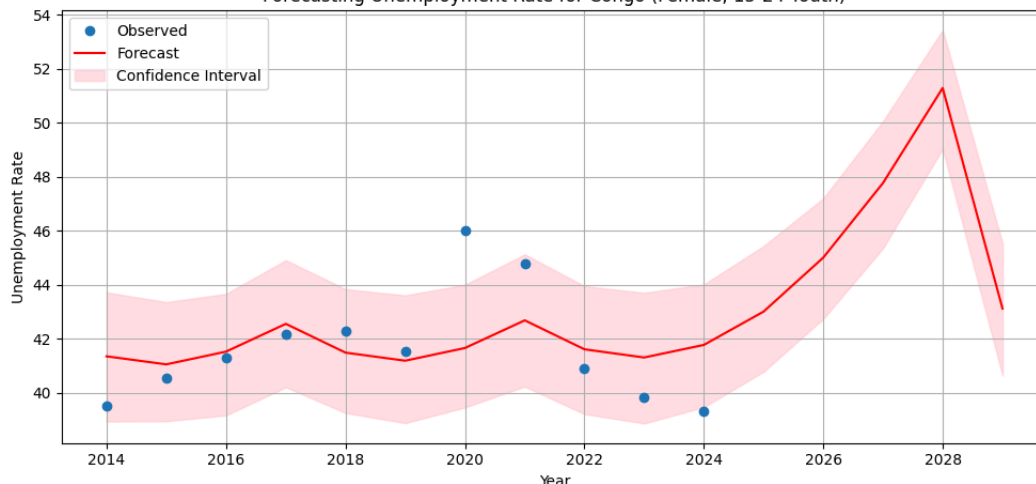
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/757rmhcd.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/gnh17a5u.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=3642', 'data', 'file=/tmp/tmpgvabj79_
15:37:08 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:08 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Comoros...
```

Forecasting Unemployment Rate for Comoros (Female, 15-24 Youth)



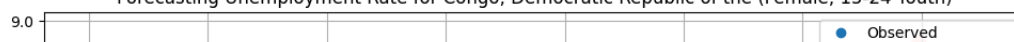
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/cnw08pv6.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/7uyyg1ld.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=15807', 'data', 'file=/tmp/tmpgvabj79_
15:37:09 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:09 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Congo...
```

Forecasting Unemployment Rate for Congo (Female, 15-24 Youth)

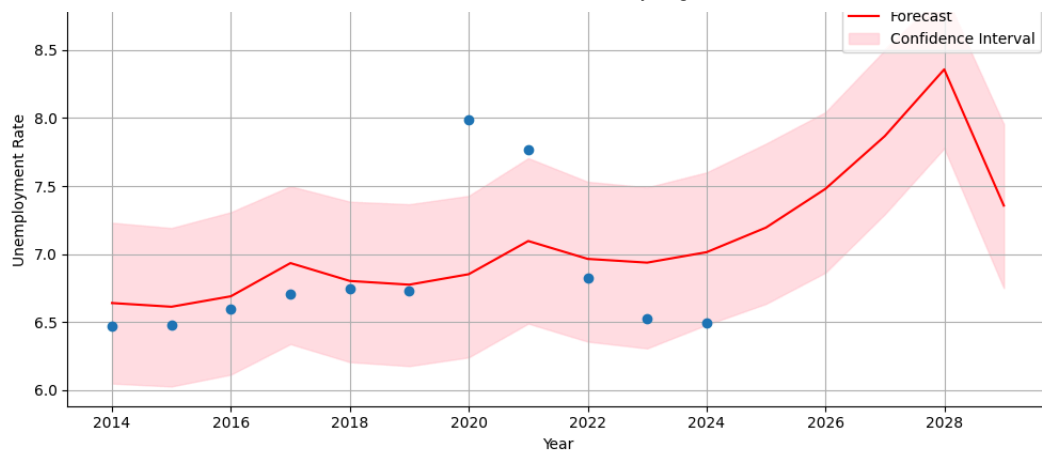


```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/re4p6mxk.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/qdse4q2h.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=34653', 'data', 'file=/tmp/tmpgvabj79_
15:37:10 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:10 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Congo, Democratic Republic of the...
```

Forecasting Unemployment Rate for Congo, Democratic Republic of the (Female, 15-24 Youth)

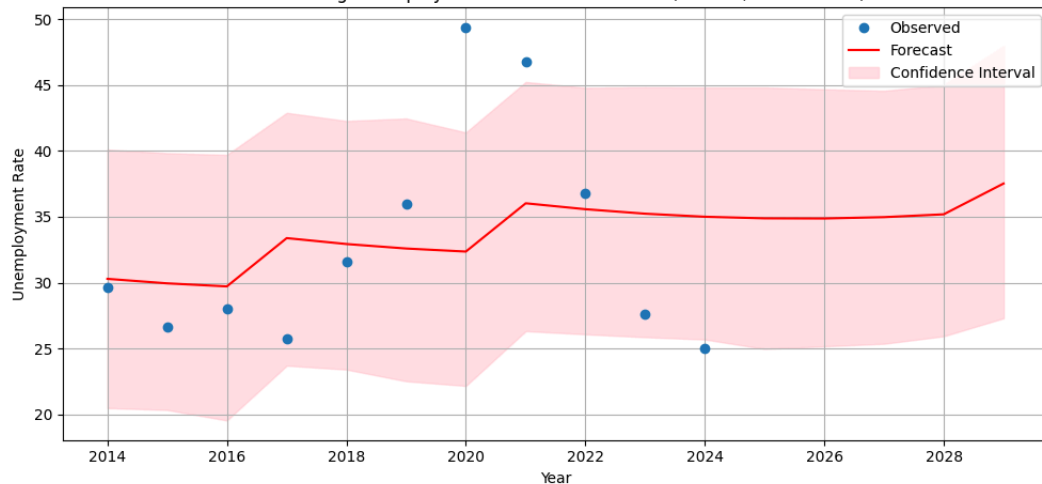






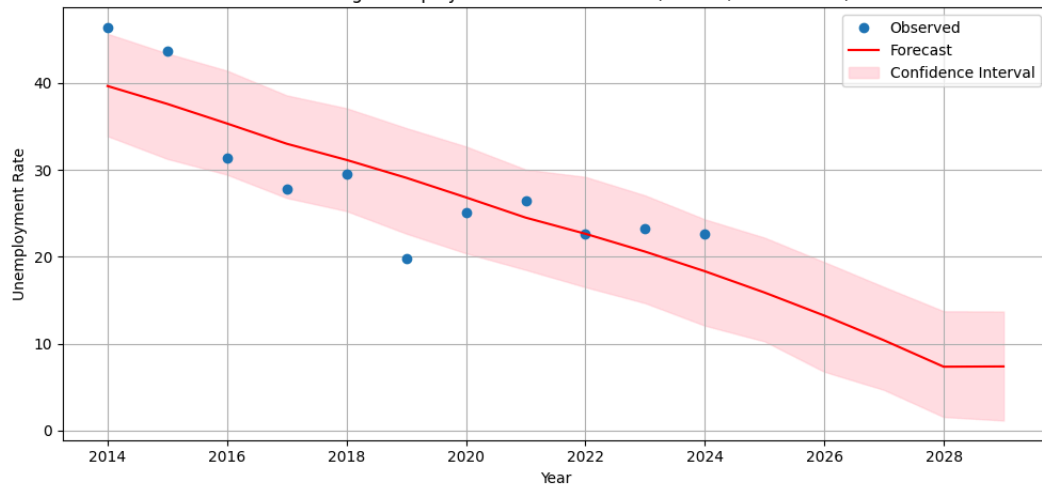
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/si0lzqmo.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/ep7y7u2a.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=26011', 'data', 'file=/tmp/tmpgvabj79_']
15:37:11 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
Processing Costa Rica...
15:37:11 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
```

Forecasting Unemployment Rate for Costa Rica (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/i3edbeyu.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/4ltzl50t.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=92159', 'data', 'file=/tmp/tmpgvabj79_']
15:37:12 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:12 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Croatia...
```

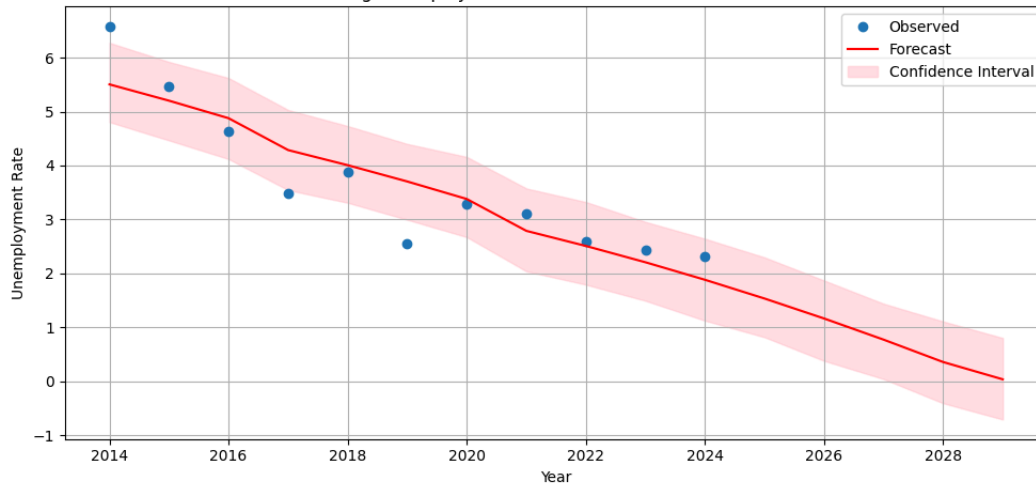
Forecasting Unemployment Rate for Croatia (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/hnxv1p8m.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/b8s3sjyz.json
DEBUG:cmdstanpy:idx 0
```

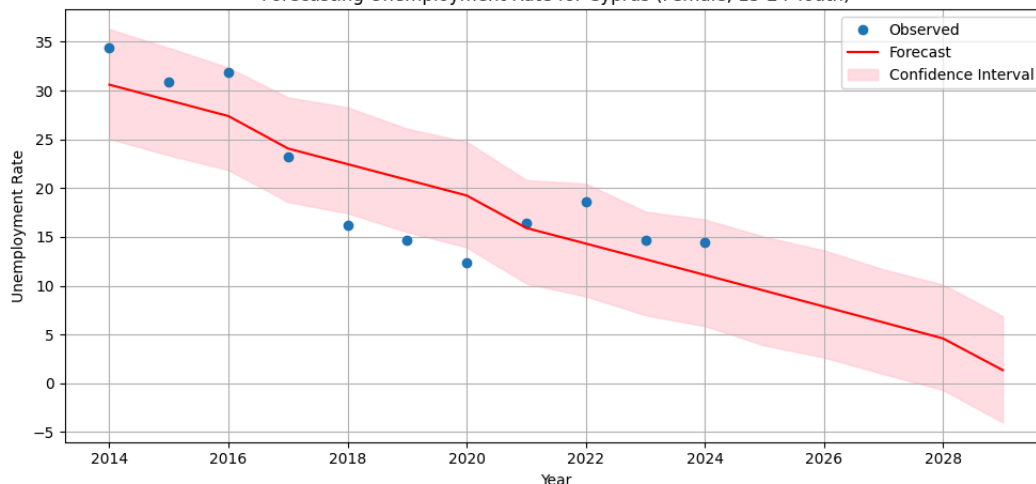
```
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=7136', 'data', 'file=/tmp/tmpgvabj79_
15:37:13 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:13 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Cuba...
```

Forecasting Unemployment Rate for Cuba (Female, 15-24 Youth)



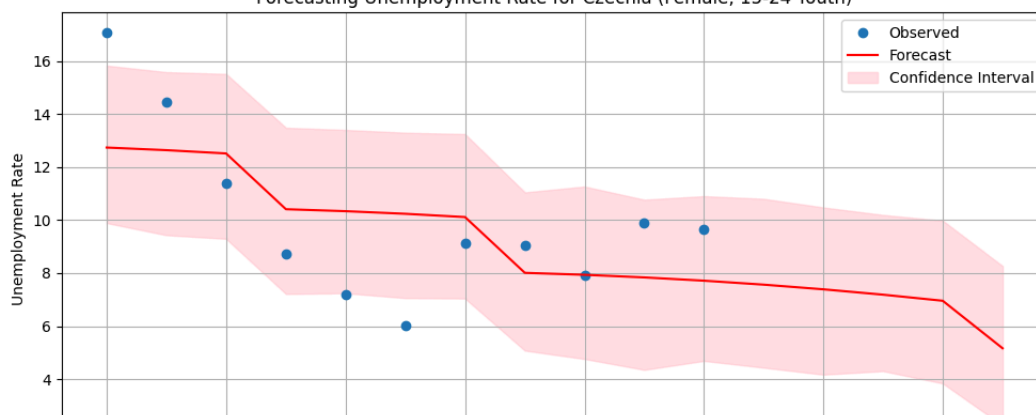
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/vs5v669d.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/16dsid_z.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=15538', 'data', 'file=/tmp/tmpgvabj79_
15:37:14 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:14 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Cyprus...
```

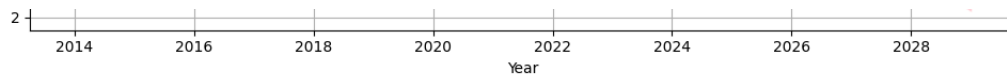
Forecasting Unemployment Rate for Cyprus (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/fg97brhe.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/qxplmxmf.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=13588', 'data', 'file=/tmp/tmpgvabj79_
15:37:15 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:15 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Czechia...
```

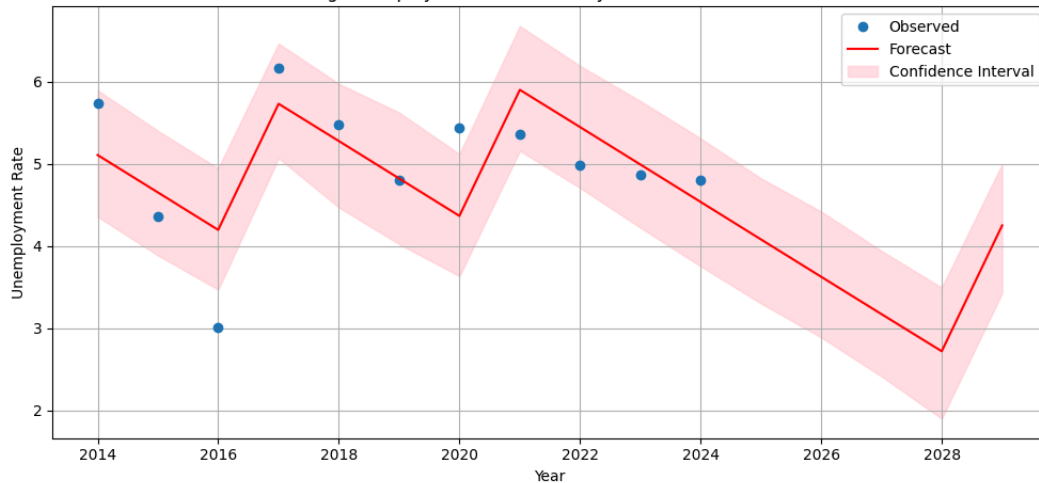
Forecasting Unemployment Rate for Czechia (Female, 15-24 Youth)





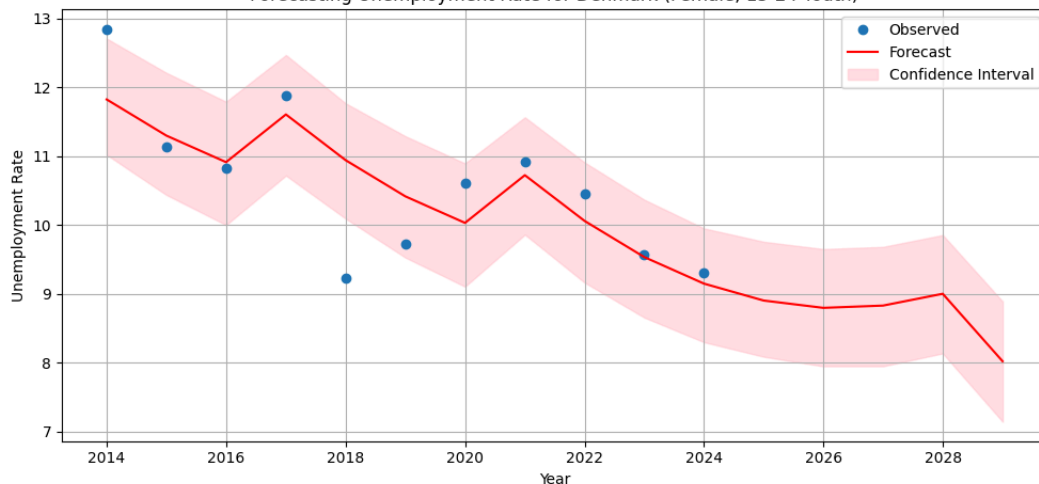
```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/pcwtkjrd.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/90skn665.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=56695', 'data', 'file=/tmp/tmpgvabj79_/pcwtkjrd.json']
15:37:16 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:16 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Ivory Coast...
```

Forecasting Unemployment Rate for Ivory Coast (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/tnipryvi.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/65k0qi2h.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=42799', 'data', 'file=/tmp/tmpgvabj79_/tnipryvi.json']
15:37:17 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
15:37:17 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
Processing Denmark...
```

Forecasting Unemployment Rate for Denmark (Female, 15-24 Youth)



```
INFO:prophet:Disabling weekly seasonality. Run prophet with weekly_seasonality=True to override this.
INFO:prophet:Disabling daily seasonality. Run prophet with daily_seasonality=True to override this.
INFO:prophet:n_changepoints greater than number of observations. Using 7.
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/in91uwc0.json
DEBUG:cmdstanpy:input tempfile: /tmp/tmpgvabj79_/ynp7y_vy.json
DEBUG:cmdstanpy:idx 0
DEBUG:cmdstanpy:running CmdStan, num_threads: None
DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.10/dist-packages/prophet/stan_model/prophet_model.bin', 'random', 'seed=53118', 'data', 'file=/tmp/tmpgvabj79_/ynp7y_vy.json']
15:37:17 - cmdstanpy - INFO - Chain [1] start processing
INFO:cmdstanpy:Chain [1] start processing
Processing Djibouti...
15:37:17 - cmdstanpy - INFO - Chain [1] done processing
INFO:cmdstanpy:Chain [1] done processing
```

```
KeyboardInterrupt Traceback (most recent call last)
<ipython-input-3-e1bc03ea7d54> in <cell line: 22>()
    69 plt.grid(True)
    70 plt.tight_layout()
--> 71 plt.show()
```

```
<decorator-gen-2> in __call__(self, obj)

/usr/local/lib/python3.10/dist-packages/matplotlib/dates.py in _dt64_to_ordinal(d)
   330 # the "extra" ensures that we at least allow the dynamic range out to
   331 # seconds. That should get out to +/-2e11 years.
```

```
--> 332     dseconds = d.astype('datetime64[s]')
      333     extra = (d - dseconds).astype('timedelta64[ns]')
      334     t0 = np.datetime64(get_epoch(), 's')
```

KeyboardInterrupt:

```
import pandas as pd
import matplotlib.pyplot as plt
```