Bharatiya Vidya Bhavan's
SARDAR PATEL INSTITUTE OF TECHNOLOGY

Advanced Data Visualization
Experiment no. 9

Submitted To

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1. Dataset

Can view the dataset here:
https://drive.google.com/drive/folders/1sYTaTsBLpkU1BNQQOsCCDgtfBIcovi7L?usp=sharing

2. Description

This dataset contains information on legal frameworks related to gender equality in employment across 53 countries. It has two columns:

Countries: Lists the names of 53 countries.

Legal frameworks on gender equality in employment: This column provides a numerical value between 0 and 1, representing each country's legal framework score on gender equality in employment. A score closer to 1 indicates stronger legal support for gender equality.**.**

3. Metadata
- **Number of Records: 53**
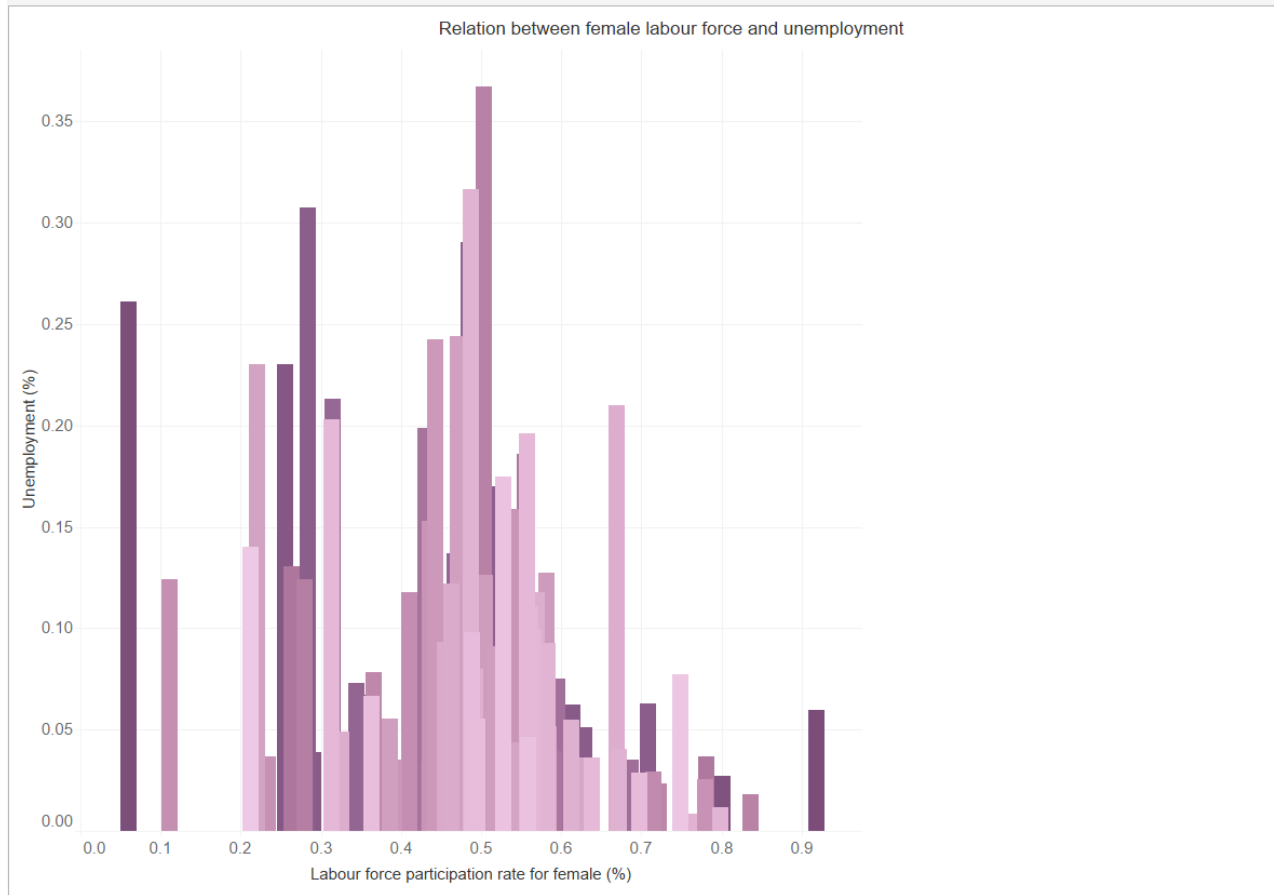- **Number of Columns: 2**

Column Details
1. **Countries**
   - **Data Type: String**
   - **Description: Name of the country for which data on gender equality frameworks in employment is provided.**
   - **Unique Values: 53 (each entry represents a unique country).**

4. Visualizations and Observations

1.

This visualization depicts the relationship between female labor force participation rates and unemployment rates across different countries. Here's a breakdown of what it shows:

X-Axis (Labour force participation rate for female %): This axis represents the percentage of females participating in the labor force in each country. The values range from 0 to 0.9 (or 90%).

Y-Axis (Unemployment %): This axis represents the unemployment rate, with values shown as percentages (0 to 0.35 or 35%).

Color Intensity and Bar Heights: Each bar's height represents the frequency of occurrences within specific ranges of female labor participation and unemployment rates. Darker bars suggest a higher concentration of data points within that range.

Observations

Distribution Patterns:

There is a higher concentration of data in the mid-range (around 0.3-0.6) for female labor force participation rates.

Similarly, unemployment rates are commonly below 0.2 (20%), with fewer instances beyond 0.25 (25%).

Potential Correlations:

The visualization seems to suggest that countries with a higher female labor participation rate do not necessarily have a higher unemployment rate.

Most high unemployment values are clustered in the mid-range of labor force participation, indicating that extremely high or low participation rates are less associated with high unemployment.

2.
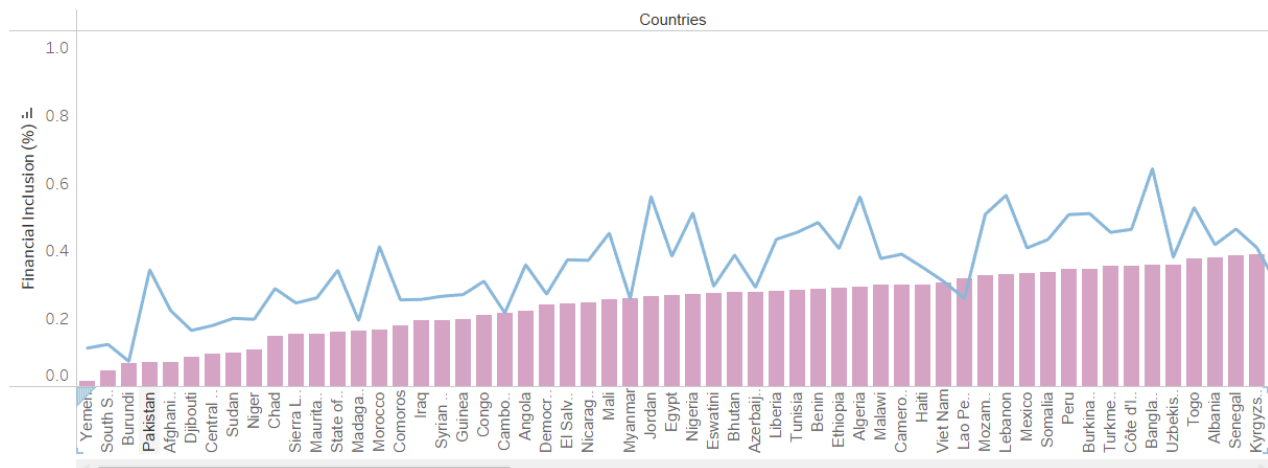
This visualization illustrates the financial inclusion rates across various countries, with the following key components:

- **X-Axis (Countries): Each bar represents a country, listed in order from lowest to highest financial inclusion rates. Due to the high number of countries, the labels may appear condensed.**

- **Y-Axis (Financial Inclusion %): This shows the percentage of the population in each country that has access to financial services, such as bank accounts or other financial institutions. The values range from 0 to 1 (or 0% to 100%).**

- **Bars (Financial Inclusion): The purple bars indicate the financial inclusion rate for**

each country. Taller bars correspond to countries with higher financial inclusion.

- **Line Graph: The blue line provides a visual trend of financial inclusion across the countries. This line allows for an easier comparison of relative financial inclusion rates between neighboring countries and highlights any significant rises or drops.**

Observations

1. **Low Financial Inclusion Countries: Countries on the left side, such as Yemen, South Sudan, and Burundi, have very low financial inclusion rates, indicating limited access to financial services.**

2. **Higher Financial Inclusion Countries: Towards the right, countries like Albania, Senegal, and Kyrgyzstan show higher financial inclusion rates, suggesting better access to financial services.**

3. **Trend Analysis: The line graph shows a generally increasing trend from left to right, indicating that financial inclusion improves across the selected countries, though there are fluctuations along the way. The trend line helps to identify patterns, with certain regions or groups of countries showing similar levels of financial inclusion.**

3.

The map uses a purple gradient scale from light to dark (0.000 to 1.000)

This suggests a scoring system where 1.000 likely represents stronger legal frameworks for gender equality in employment

Geographic Patterns:

Strong frameworks (darker purple) appear in:

Western Europe

Australia

Parts of South America (notably Brazil)

Moderate frameworks (lighter purple) appear in:

India

Some African nations

Notable Patterns:

There seems to be a correlation between economic development and stronger legal frameworks for gender equality

Regional clusters are visible, suggesting possible influence of regional policies or cultural similarities

Some emerging economies show progress in establishing these frameworks

5.Tableau Workbook

https://drive.google.com/drive/folders/1sYTaTsBLpkU1BNQQOsCCDgtfBIcovi7L?usp=sharing