Title: Country Trade Data Visualization

Recreation Viz: William Playfair's Import-Export Visualization

Dataset Name: country.csv

Data Source: https://www.census.gov/foreign-trade/balance/index.html

Dataset Description:

Column Name	Variable Type	Description
Year	Numerical	The year when the trade measurements were recorded.
		Ranges from 1985 to 2021
Ctyname	Categorical	Region or the country involved in the trade. Totally 256 regions are involved.
Ijan, Ifeb, Imar, Iapr, Imay, Ijun, Ijul, Iaug, Isep, Ioct, Inov, Idec	Numerical	The import trade amount in US million dollars from the month January to December respectively for the corresponding ctyname.
IYR	Numerical	The total import trade amount for the region from January to December.
Ejan, Efeb, Emar, Eapr, Emay, Ejun, Ejul, Eaug, Esep, Eoct, Enov, Edec	Numerical	The export trade amount in US million dollars from the month January to December respectively for the corresponding ctyname.
EYR	Numerical	The total export trade amount for the region from January to December.

Purpose of Visualization:

The economy of the country say GDP, foreign exchange rates depends on the country's import and export trading. If a country has more imports then more money is leaving the country. If a country has more exports then more money is flowing into the country and there are high employment and economic activity.

- a) Through Import and Export visualization we can understand a country's economic status.
- b) How the economy of one country compares to the other.
- c) How the economy of a country ranges over time.

Visualization 1: Recreation of William Playfair's Import-Export Visualization

Created with: D3.js

Queries Answered:

- a) What is the trend in the import and export trading of a country?
- b) Does the given country have more imports or exports?
- c) What is the import/export quantity a country has made in the given year?

Insights Found:

- a) Singapore had more exports than imports between the years 2000 to 2019, but in 2020 because of covid there were more imports than exports.
- b) India being a developing nation, imports more than exports.
- c) UAE is rich in petroleum resources, so its import to export ratio is 1:5 approx.
- d) Under-developed countries like Bangladesh have a huge import trade than the export trade.

Visual Encoding:

Marks: Lines, Area

Channels: Horizontal and Vertical Positions, Hue

Chart Type: Area Chart

X-Axis: Year

Y-axis: US Dollars in Million

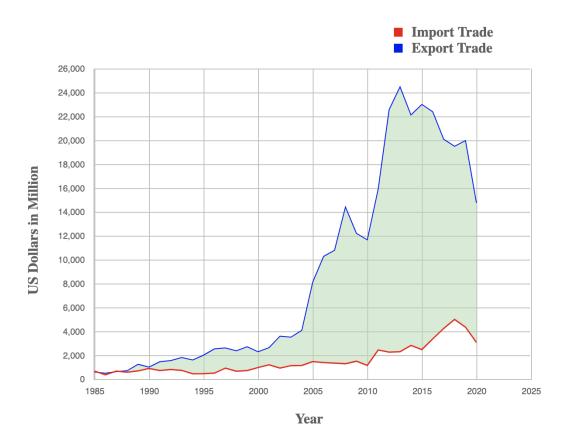
Columns used: year, IYR, EYR, Ctyname

- Import trade is represented with a red color line.
- Export trade is represented with a blue color line.
- The area between the red line and the blue line represents the volume of trade the country has been engaged with.

Dropdown is available to switch between countries.

Country Trade Data Visualiation

Choose Category: United Arab Emirates ➤



Visualization 2: Country Trade Data Visualization in WorldMap

Created with: Tableau

Queries Answered:

- a) Which country has the highest Import trade volume?
- b) What is the total import/export quantity a country has made so far?

Insights Found:

a) Canada and China have the highest import trade volumes.

Visual Encoding:

Marks: Lines

Channels: **Saturation**Chart Type: **World Map**



Viz URL:

https://prod-apnortheast-a.online.tableau.com/t/infovissocnus/views/CountryTradeDataVisualization/Sheet1?:showAppBanner=false&:display_count=n&:showVizHome=n&:origin=viz_share_link