



Data Visualisation

Global Trade Analysis

TheLumineers

Daksh Rawat 2018101087

Fiza Husain 2018101035



AIM

To create simple and informative Data Visualisations on Global Trade analysis to help people understand the significance of international trade policies by placing it in a visual context. Patterns and correlations that might go undetected in text-based data can be exposed and recognized easier with these data visualizations.



Datasets used

- export.json
- import.json
- line_export.csv
- line_import.csv
- trade_balance.json
- trade_balance_by_country.json



Datasets Source

<http://www.intracen.org/itc/market-info-tools/trade-statistics/>



How we visualised?

We used ObservableHQ Notebooks and used D3.



Change of Data

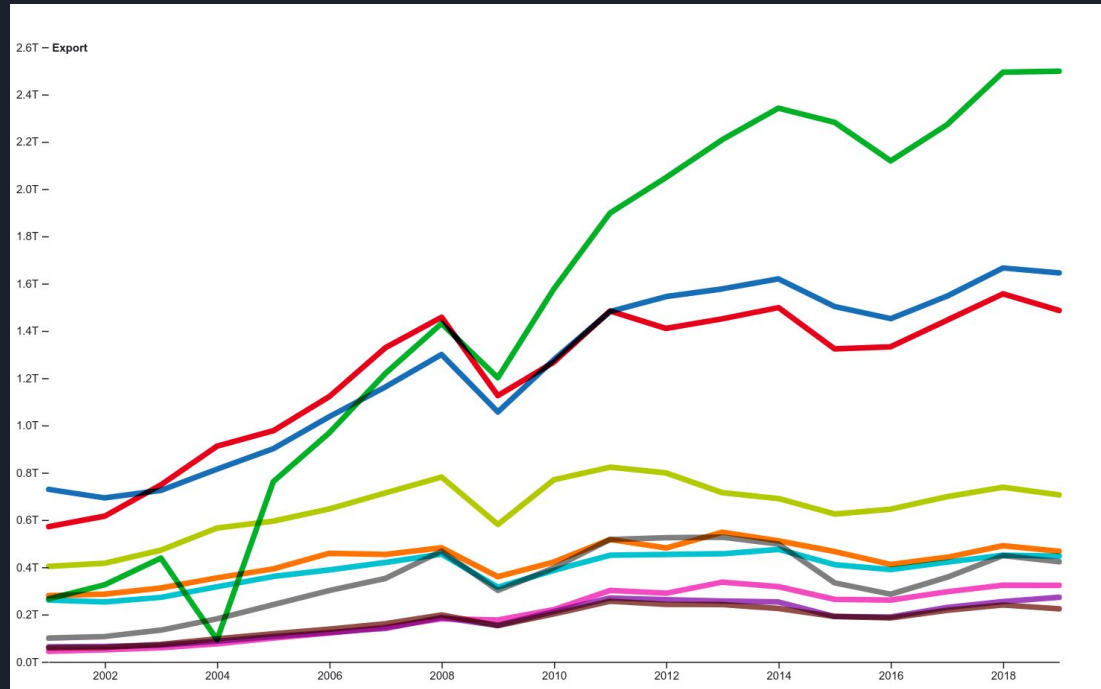
We have interpreted the data and cleaned the data for visualisation and created new data files.



Visualisations Created

- Line chart to compare countries on the basis of export/import value.
- Bar chart to compare different categories on the basis of quantities of different items over the years.
- Bar chart to see trade balance trades by country or by year.

1) Trade Market Analysis

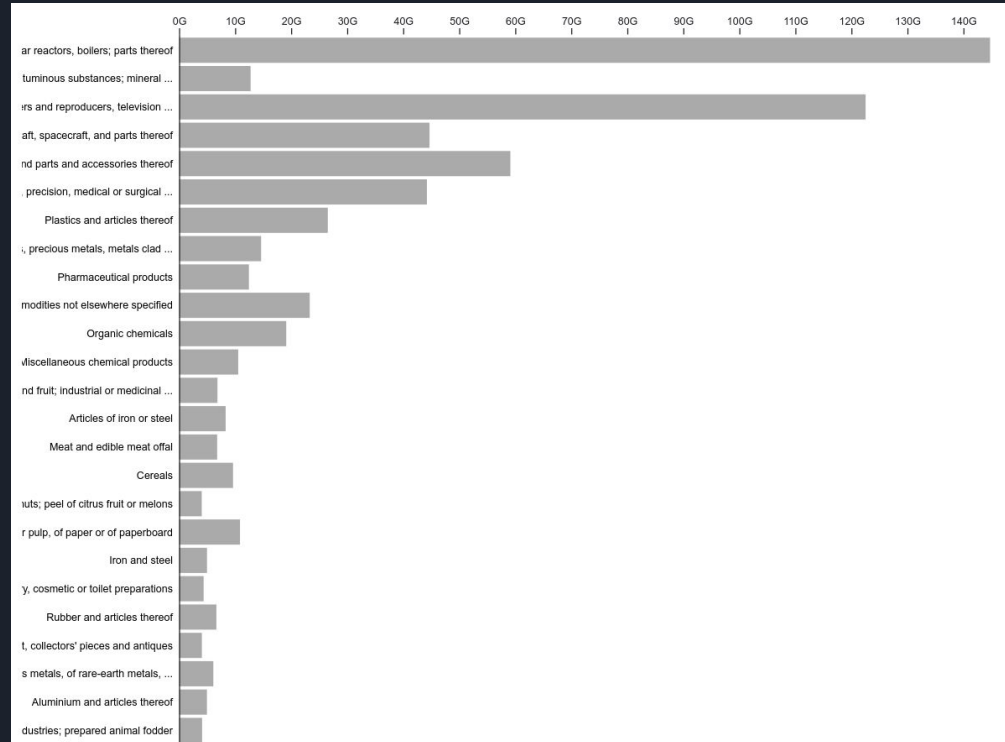




Analysis of visualisation 1

- Compare countries on the basis of trade flow i.e. export or import value.
- We can hover any line to view trade flow statistics for that particular country over the years from 2001 to 2019.
- We can clearly find out which country had largest import/export balance in any year.

2) Category-Wise Import-Export-Country Wise



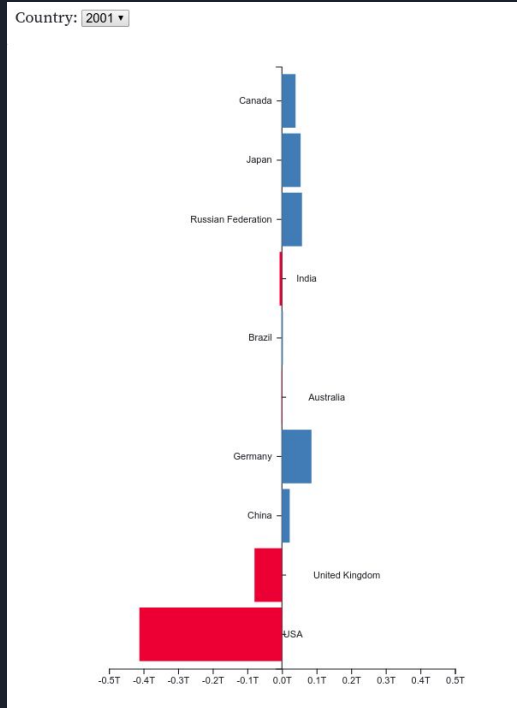


Analysis of visualisation 2

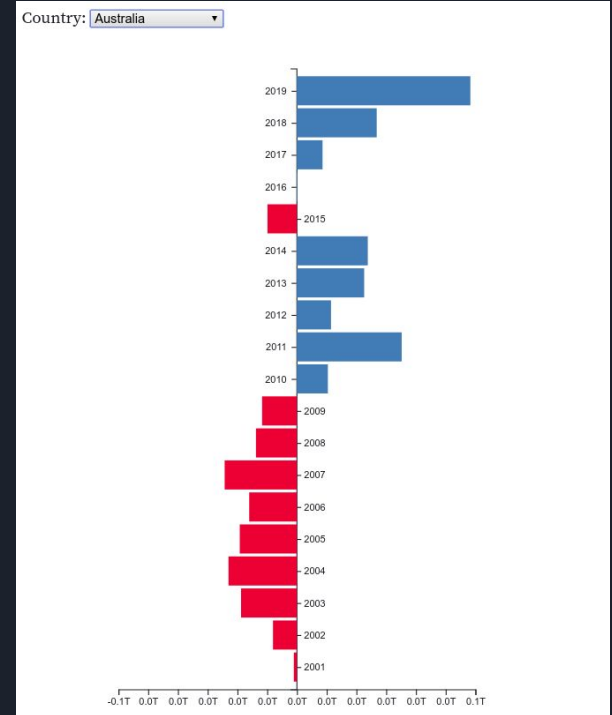
- Compare different categories of commodities of a particular country on the basis of quantity.
- We can click on any country to create a bar graph to show the statistics for each year from 2001 to 2019.
- We can then click on any year to see different categories of commodities of a particular country in a particular year on the basis of quantity.

3) Trade Balance Trends

a) By Year



b) By Country





Analysis of visualisation 3

- Trade balance analysis by year or by country.
- By year: Compare trade balances of each country for the selected year.
- By Country: Compare trade balances over the years for the selected country.
- Red implies negative trade balance while blue denotes positive trade balance.



How does it meet the purpose?

Our aim was to make the complicated trade analysis data easily understandable through visualization.

We wanted to show and visualise the trends in trade balance over the years using total import and export data and we managed to achieve that through our third data visualisation.

We wanted to show where different countries stand against each other in terms of trade flow over the years and we did it in our first visualisation.

We wanted to show how much of different commodities each country possesses and we did it in our second visualisation.

We wanted to show where different countries stand against each other in terms of trade balance over the years and we did it in our third visualisation.



Link to demo video

<https://www.youtube.com/watch?v=IjLILyIMQno&feature=youtu.be>